

Why isn't Google welcome in Kreuzberg?

SOCIAL MOVEMENT AND
THE EFFECTS OF INTERNET
ON URBAN SPACE



Karina Mendonça de Almeida

Why isn't Google welcome in Kreuzberg?

SOCIAL MOVEMENT AND
THE EFFECTS OF INTERNET
ON URBAN SPACE

Master thesis
Karina Mendonça de Almeida, B.Sc.

Bauhaus-Universität Weimar
Faculty of Architecture and Urbanism
Institute of European Urban Studies (IfEU)
M.Sc. European Urban Studies

1 st Examiner: Prof. Dr. Frank Eckardt

2 nd Examiner: Anton Brokow-Loga, M.Sc.

Weimar, August 24 th, 2020.



ABSTRACT

Advances in information and communication technologies, e.g. the Internet, have driven a great transformation in the interactions between individuals and the urban environment. As the use of the Internet in cities becomes more intense and diverse, there is also a restructuring of urban space, which is experienced by groups in society in various ways, according to the specificity of each context. Accordingly, large Internet companies have emerged as new players in the processes of urbanization, either through partnerships with the public administration or through various services offered directly to urban residents. Once these corporations are key actors in the digitalization of urban services, their operations can affect the patterns of urban inequality and generate a series of new struggles over the production of space. Interested in analyzing this phenomena from the perspective of civil society, the present Master Thesis examined a social movement that prevented Google to settle a new startup campus in the district of Kreuzberg, in Berlin. By asking why Google was not welcome in that context, this study sought to understand how internet, as well as its main operators, has affected everyday life in the city. Thus, besides analyzing the movement, I investigated the particularities of the urban context where it arose and the elements that distinguish the mobilization's opponent. In pursuit of an interdisciplinary approach, I analyzed and discussed the results of empirical research in dialogue with critical theories in the fields of urban studies and the Internet, with emphasis on Castells' definitions of urban social movements and network society (1983, 2009, 2015), Couldry's and Mejias' (2019) idea of data colonialism, Lefèbvre's (1991, 1996) concepts of abstract space and the right to the city, as well as Zuboff's (2019) theory of surveillance capitalism. The case at hand has exposed that Google has a prominent role in the way the Internet has been developed and deployed in cities. From the perspective accessed, the current appropriation of Internet technologies has been detrimental to individual autonomy and has contributed to intensifying existing inequalities in Berlin.

Keywords: Social movement, urban space, internet, tech company, Berlin.

CONTENTS

ACKNOWLEDGMENTS	11	4.2 THE INTERNET IN THE URBAN SPACE	95
1 INTRODUCTION	13	4.3 GOOGLE & CO.....	98
1.1 CASE STUDY.....	16	5 DISCUSSION.....	105
1.2 RESEARCH STRUCTURE.....	19	5.1 GENTRIFICATION AND BEYOND.....	105
2 SOCIAL MOBILIZATION.....	23	5.2 SPACE FOR SOLIDARITY	111
2.1 URBAN SOCIAL MOVEMENTS	23	6 CONCLUSION.....	117
2.2 THE CAMPAIGN AGAINST A GOOGLE CAMPUS	29	REFERENCES	120
2.2.1 RESOURCES AND METHODS	30		
2.2.2 ONLINE AND OFFLINE ELEMENTS	36		
2.2.3 STRUCTURE OF ACTORS AND CLAIMS	54		
2.2.4 CONTRIBUTIONS	63		
3 URBAN SPACE.....	69		
3.1 THE PRODUCTION OF URBAN SPACE.....	69		
3.2 URBAN CONTEXT: BERLIN	73		
3.2.1 KREUZBERG.....	80		
3.2.2 STARTUPS AND THE SMART CITY PLAN	84		
4 INTERNET.....	89		
4.1 CONNECTION AND SURVEILLANCE.....	89		

LIST OF FIGURES

Fig. 1 Banner in front of the Umspannwerk Kreuzberg.....17

Fig. 2 Diagram: procedures of social network analysis..... 32

Fig. 3 Local newspaper against the Google Campus (ed. #1). 38

Fig. 4 Local newspaper against the Google Campus (ed. #2). 38

Fig. 5 Local newspaper against the Google Campus (ed. #3). 39

Fig. 6 Posters affixed to district walls: invitation to noisy demonstratiron..... 40

Fig. 7 Demonstration against the Google Campus in front of the Umspannwerk.41

Fig. 8 Facade of the Umspannwerk after protesters sprayed and threw paint balloons..... 42

Fig. 9 Invitation to demonstration walking around the neighbourhood, on March 3, 2018. 43

Fig. 10 Event “Kick Google aus dem Kiez”, on June 14, 2018. 44

Fig. 11 Invitations to the Anti-google Café face2face at Kalaballk..... 44

Fig. 12 Invitation to the InterLause #1 – Kreuzberg Gegoogle, on November 1, 2017 45

Fig. 13 Poster criticizing Umspannwerk’s handing-over to Karuna and Betterplace..... 47

Fig. 14 Invitation to the Post Anti-google Café face2face at Kalaballk..... 48

Fig. 15 Banner hanging from windows in the district. 49

Fig. 16 Banner at the entrance of a building. 49

Fig. 17 Banner in front of the Umspannwerk Kreuzberg. 50

Fig. 18 Urban intervention “Mach mal, Google aus”..... 50

Fig. 19 Campaign and event posters affixed around the neighborhood. 51

Fig. 20 Sticker from the “Fuck off Google” campaign. 51

Fig. 21 Posters from the “Google Campus & Co verhindern” campaign. 51

Fig. 22 Found in Berlin: grafitti “Fight the power, fight Google”. 52

Fig. 23 Found in Berlin: grafitti “Mieten unter, Google raus” (Rent below, Google out). 52

Fig. 24 Found in Berlin: grafitti “Shutdown Google”. 53

Fig. 25 Found in Berlin: grafitti “Freiheit wird erkämpft, nicht gegooglet” (Freedom is fought for, not googled)..... 53

Fig. 26 . Retweets network map. 56

Fig. 27 Campaign poster with the reasons to fight Google. 59

Fig. 28 Found in Berlin: grafitti “www.bing.com/search?=fuck+google+gentrifickation&go” 60

Fig. 29 Solidarity from the anti-eviction movement in San Francisco to the movement in Kreuzberg 64

Fig. 30 Solidarity from Kreuzberg to San Francisco, San Jose, Rennes and Toronto. 65

Fig. 31 Message of solidarity to the movement against the Sidewalk Labs project in Toronto. .. 66

Fig. 32 Sticker found in Kreuzberg: Invitation to Anti-amazon café Face2Face at Kalaballk. . 67

Fig. 33 AI Startups in Germany.....74

Fig. 34 Unemployment in Germany (%), 2019..... 76

Fig. 35 Housing cost’s share of purchasing power in Berlin. 76

Fig. 36 Districts of Berlin. 78

Fig. 37 Rental offers in Berlin, 2018..... 78

Fig. 38 Status-Index 2017. 79

Fig. 39 Foreign Residents in Berlin, 2016..... 79

Fig. 40 Kreuzberg: subdivisions and startups..... 81

Fig. 41 Edition of “The Economist” on the value of data, May 2017. 95

LIST OF TABLES

Table 1 List of online resources..... 31

Table 2 Online resources: phases of analysis 33

Table 3 Division of dataset by period 34

Table 4 Most shared hashtags in all groups 55

Table 5 Exclusive hashtags most used by each group..... 57

ACKNOWLEDGMENTS

Although this thesis is a piece of individual research, it is also the outcome of a collective effort so that I could access, analyze, organize, write and edit what is found here. Consequently, I could not conclude it without leaving my deepest gratitude to everyone who contributed in this process.

From the Institute for European Urban Studies, I would like to thank especially Elodie Vittu and Lisa Vollmer for their essential support in the first steps of this research, introducing me to research institutes and researchers in Berlin. I also thank Professor Frank Eckardt for his guidance and support at various moments throughout this Masters program, including during the course of this research.

During the first months of field research in Berlin, I relied on the crucial supervision and assistance of researchers from the social computer science team at the Centre Marc Bloch. I therefore owe my sincere thanks to Camille Roth and Telmo Menezes for their patience and commitment to assisting me in data collection and for the lessons on social network analysis. I am also grateful for the opportunities I had to discuss my research project and bibliography with the working group “Stadt und Raum” from the Institute for Social Movement Studies (IPB).

The availability and generosity with which the interviewees received me were also fundamental to the results achieved. During our talks they provided me with references of places, people, websites and readings that underpinned much of the qualitative research. In particular, I thank the one who lent me for consultation a lot of printed material produced by the movement.

The chats and sharing of experiences with my friend and classmate, Luiza, were also very precious and contributed to make the journey of research and learning less solitary and more supportive. I am also very grateful to my dear friends Matheus, Tulio and Vinícius for proofreading the text, as well as for the help with setting up and final editions. Finally, I thank Timóteo immensely for his love, care, encouragement, opinions and daily dialogues, which certainly were crucial for the development of this work.

1 | INTRODUCTION

Internet has been changing our lives and spaces in many ways. This occurs to the extent that it becomes a widely used means of information and communication in today's societies. Besides our individual use in smartphones and personal computers, the Internet is present in our daily routines in various activities, whether at work, at home, at school and in the car, or when we use public and private services. Taken together, individual, corporate and government uses of internet compose the current logic in which we communicate and operate our lives in the city (Kellerman, 2019). Its technological infrastructures (both software and hardware) are employed to manage complex systems as global logistics, financial transactions, surveillance, traffic, and many other sorts of information flow that shape our spaces and social relations. This means that the widespread of this connection technology is a phenomenon that has been promoting "a deep reorganization of social space and time" (Couldry & Mejias, 2019, p. 20), thus changing the very mode of urban development.

Associated with it, a particular vocabulary is in use today, this includes more technical concepts as Internet of Things (IoT), algorithms, artificial intelligence (AI), machine learning, augmented reality, big data, facial recognition and ubiquitous computing, as well as more socially used terms such as selfies, tweets, streaming, likes, digital influencer, follower, personalization, social media and so on. Similarly, the idea of Smart Cities have in recent years guided many urban policies, and new urban facilities have arisen from the development of internet technologies, with several examples coming from the mobility sector, e.g. bike, scouter, car, ride sharing and route planners. In addition, diverse cities have adopted "online participatory techniques" (Grodach & Ehrenfeucht, 2016, p.225),



and grassroots mobilization have been able to build networks with global peers, exchanging knowledge and strengthen its causes (Castells, 2015).

Accordingly, along the last decades scholars have engaged in critical studies about the internet phenomenon from different perspectives. Some examples are Kellerman's (2019) analysis of the urban restructuring produced in the internet city as well as Morozov and Bria's (2018) review of the Smart City idea. Likewise, Barns (2020) has discussed the way digital technology affects urban life, identifying the rise of a platform urbanism. Castells (2000, 2009, 2015) also reclaimed the emergence of new social structures of power and counter-power shaped by internet, a format he calls network society. From a socioeconomic perspective, Zuboff (2019) has conceptualized the new economic logic derived from internet connection as surveillance capitalism. Furthermore, from the field of media and internet studies, Couldry and Mejias (2019) and Thatcher et al. (2016) reflect about the effects that dynamics of data flow generated online may have on urban society, in a process they define as data colonialism.

Though the advantages of internet connection seem to be well publicized and often relate with the rapid and mobile provision of means to exchange information around the world - allowing people to share and access knowledge - criticism usually target its larger operators: the tech-companies. Many authors (Castells, 2009; Couldry & Mejias, 2019; Morozov & Bria, 2018; Zuboff, 2019) have advised that it is crucial to ask who owns and controls the infrastructures and services of internet, as well as which relations they enact and which kind of inequalities they may produce or reinforce. This means that instead of looking at it as a mere technical improvement, we should also consider the economic imperatives of its corporations and the new power arrangements built up from these technologies. Comprehending the power relations, emerged from digital dynamics, implies in the recognition that groups in society appropriate this mean in different ways, according to their own resources and social networks (Castells, 2009). For instance, while some are able to decide how the data generated in the internet is managed, some are in charge of programming the online networks and others may be just regular users

searching for some information in the web.

How do these power relations resonate in the urban space? As we juxtapose the virtual and physical spaces, the interactions between the state, civil society and private corporations occur in multiple levels, thus requiring further interdisciplinary analysis. In the governance field, associations between tech-companies and municipalities follow the logic of urban entrepreneurialism (Harvey, 1989), in which the hosting of strategic corporations aims at attracting further investment to the city. Then, these businesses appear as players that push urban development, whether as job and service providers or as private partners implementing smart solutions to urban problems (Morozov & Bria, 2018, p.15). In this kind of articulation, internet services add to the promotion of a profit-based city (Brenner et al., 2012) and may accentuate its resulting inequalities. Thus, such enterprises take part in city restructuring in a way that benefits some urban spaces and groups in society while depriving others. Likewise, partnerships between the state and internet companies might provide for developing "new technologies and ideologies of control" (Uitermark et al., 2012, p. 2550), which means that these alliances would help to ensure that the dominant power structure is maintained and reinforced.

Nevertheless, there is a need to better understand the impacts of this dynamic from the perspective of civil society. How do people understand the effects of internet on the city? Are there groups that contest it? Why and under what circumstances? Approaching this topic, Shaw and Graham (2017) argue that understanding how internet corporations have transformed urban life is fundamental to contemporary demands for urban change. The existing hypotheses are that given the dissemination of such technology in the city, urban activists could appropriate the internet both as a means of network mobilization (Castells, 2009, p.302) and as an urban resource whose control and access should be demanded (Shaw & Graham, 2017). Informed by these views, this master's thesis proposes the analysis of a case study as a way to understand how urban dwellers have perceived and criticized the influence of technology companies in their daily activities. Furthermore, by observing the ongoing relationships between internet industry, urban space and society, this study assumes

that the collective reaction to technology companies may reveal the extent to which these corporations produce and intensify socio-spatial injustices. Therefore, as a work in the field of European Urban Studies, a mobilization in the city of Berlin will be analyzed, here treated as a local expression on the repercussion of global processes (Uitermark et al., 2012, p. 2548).

1.1 | CASE STUDY

In late November 2016, Google announced that they had planned to open its seventh campus within a year, this time in Berlin. As benefits of such structure in the city, they pointed it could strengthen the existing startup scene, generate many jobs and raise funds (Grove, 2016, November 23). The new campus would be located in an old power substation (*Umspannwerk*), a historic building in the district of Kreuzberg, and was aimed at hosting startups and promote entrepreneurship (idem). As soon as Google publicized their propose to the building in Kreuzberg, local residents started meeting to discuss the disadvantages the project could deliver to their urban environment. Besides the promise of bringing job opportunities and money to the city, locals considered the campus could aggravate the gentrification process in the area, reinforcing the establishment of a “startup culture” in the neighborhood (Anonymous, 2018). The district has a particular history with social struggles, being home of several collectives fighting eviction (FHXB Museum, n.d.). This means that at the time first concerns were raised, a local network of resistance already existed. In addition, along with these grounded relations, the emerging fight also activated online resources.

The movement that followed was called by several names, such as Fuck of Google (n.d.), “Google is not a good neighbor” (Google ist kein guter Nachbar, n.d.), counter campus or “Prevent Google Campus & Co” (Google campus & Co verhindern, n.d.), and was mainly characterized by regular meetings in nearby spots as well as noisy demonstrations in front of the prospected building. On the one hand, throughout the fighting period the cause expanded in the virtual sphere. The campaigns (above



Fig. 1 Banner in front of the Umspannwerk Kreuzberg.

Source: wiki.fuckoffgoogle.de

mentioned) managed their own web pages, and their two accounts on social media gathered hundreds of followers. On the other hand, the process of mobilization developed with few, if any, articulation with city official representatives. In the release note, Google pictured the support of Berlin’s major (Grove, 2016, November 23) and in other event, a local newspaper reported that the tech-giant’s project was facing obstacles in the city council (Berliner Morgenpost, 2017, April 23).

After enduring almost two years of protests, Google withdrew the project for Kreuzberg in October 2018. Although they were still renting the space, they handed it over to two non-profit organizations, Betterplace and Karuna (Betterplace et al., 2018, October 24). Since then, both sides of the dispute have had their unfolding. Google’s expansion in Berlin did take place a few months after the back off, but at another location and not as a campus. In January 2019, they celebrated the opening of their new office on Museum Island in the Mitte district (Bremer, 2019, January 24). From the company’s retreat from Kreuzberg, local demonstrations

stopped. However, part of the once involved activists still meeting regularly to discuss further impacts that Google and other tech companies can have on the city. One recent outcome is the ongoing mobilization against the Amazon Tower, in Friedrichshain (@FuckOffGoogle, n.d.; Berlin Vs Amazon, n.d.; Fuck offAmazon, n.d.).

There are three elements of this case that motivated this research: the social movement (campaign against Google Campus), the urban space (Kreuzberg, Berlin) and the internet company (Google). Both the mobilization's opponent and the urban context where the fight took ground are very distinct. While the former is among the leading companies in the Internet realm (Couldry & Mejias, 2019; Zuboff, 2019), the latter is a central district, which brings together various social groups in struggle, within the second largest European startup hub (Startup Heatmap Europe, 2019). Because they cast contrasting lights on the Internet phenomenon, together these particularities provide the conditions to observe some of the power-relations at play currently, as well as their implications in the city making. That is, this case study figures as one of those "unique situations in which a particular phenomenon, considered by our theory to be crucial, is amplified" (Castells, 1983, p.xx).

Therefore, by asking why Google is not welcome in Kreuzberg this study proposes analyzing the transformation that the tech-giant impose on lives and spaces, also discussing how locals oppose this influence, that is, how they become aware of these effects and how they organize to fight them. Accordingly, it addresses some of the negotiations of space production that emerge under the regime of increasing connectivity via internet. The intention of such enterprise is contributing for current debates about social justice in the city, adding new perspectives and experiences to these discussions. In an effort to bridge concepts coming from different areas, the research goal is also supporting an interdisciplinary approach to the internet phenomenon, one that goes beyond the academic boundaries and find practices in everyday life. This way, strengthening the arguments in favor of cities and technologies oriented to social goals.

1.2 | RESEARCH STRUCTURE

This is a work developed in two phases. One focused on the mobilization and the other on the internet corporation and the dynamics of space production. That is, it goes from "relations of immediacy" to "general processes" (Lefèvre, 1996, p.112), in search of producing a seam of the relations and meanings of these levels of investigation. The first stage started of a few theoretical guidelines and the selected case study. At that point the goal was examining the mobilization main elements: resources, concerns, strategies, actors. Suitably, it included interviews, visits to the neighborhood, and especially the analysis of the movement's online speeches. Then, having a picture of the issues and actors involved in the protest against the Google campus in Kreuzberg, the second phase engaged in further analyzing the other two elements of this contest: the tech-company and the urban context. This part relied on a broader literature review, the examination of institutional documents and city reports.

As a result, this study is divided in three chapters of analysis and one of discussion, where the link of topics further develops. In chapter 2, the topic is the social movement, representing the "near order" of local relations (Lefèvre, 1996, p.101). Further, chapter 4 explores the Internet, with the tech-giant figuring as one of its institutions, a representative of the "far order" of ongoing global processes (idem). As arena and intermediary, chapter 3 analyzes the space where those power-relations are negotiated, i.e. the city. Then, by connecting the findings of these previous sections, chapter 5 brings the conversation around the current operations of urban restructuring and the challenges it imposes on social justice.

The three central chapters (2,3 and 4) start with definition of concepts and the theoretical framework used for interpreting the topic of that section. Then, each part follows with their specific analysis. As the first phase of research is grouped in chapter 2, this section also includes the description of methods that were employed for data collection and analysis of the mobilization. In addition, the second chapter presents the campaign material, such as pictures, online resources, posters and street art created during the protests period. This section ends with three

contributions: a summary of the mobilization agenda, identification of some of the preexisting concerns that relate to it and the unfolding of networks formed from this movement.

Next section explores the features of the space where the movement emerged. Initially it introduces some key moments in the recent history of Berlin that contributed to the present urban landscape. Then, it is complemented with data about demographics and thriving economic sectors as research and technology. Moving to the district level, it recalls historic struggles occurring in Kreuzberg along with data about demographics and reconfiguration trends. In order to better understand how the city approaches the internet technology in its urban development plans, it also examines part of Berlin's 2015-2030 urban plan. Therefore the objectives for this part are: to outline some of the elements that make up this specific urban scenario today and to assemble some data on how the Internet theme is present in it.

Chapter 4 is dedicated to the topic of Internet. Besides initial definitions and theories, it advances the investigation about the uses of such technology in the city. This section also contemplates more detailed account of Google's structures and practices, including the definition of what is a Google campus and how their services permeate our daily lives. Complementary, it takes up some aspects of the tech-giant that have already been introduced in previous sections and, conversely, refers to elements of social mobilization and the space concerned.

Then, chapter 5 discusses the interactions between the three elements analyzed so far, which is developed in two axes. The first one tackles the conflicts arising from the socio-spatial reconfiguration triggered by Internet technology and its corporations, while the second one debates the effects of the internet phenomenon on individual's rights and democratic participation, as well as new features of urban activism. Finally, the last chapter sums up the research findings and highlight some points where further research is needed, as well as new questions that opened in the analysis process that could motivate other studies. Properly, it also asserts the limitations of this work and discusses the contributions it has tried to deliver.

2 | SOCIAL MOBILIZATION

There are many kinds of collective action in daily life and these have various causes and purposes. Yet, when a group of individuals organize specifically to protest, they highlight problems that affect a determined society in a certain space and time. In order to understand this particular form of collective engagement, an extensive amount of studies has been developed in the field of social movement. Given the research goal and the case study at hand, this section frames some theories relating these movements with their urban context, namely the work of Castells (1983; 2009; 2015), Lefèbvre (1996), Mayer (2006a; 2012; 2016), Novy & Colomb (2012), Shaw and Graham (2017) and Uitermark et al. (2012). Thus, assuming that the campaign against the Google Campus can inform us about the mechanisms of space production of our time, the chapter opens by discussing the main concepts and theories associated to social movements in the city and then goes on to study the mobilization in Kreuzberg.

1.1 | URBAN SOCIAL MOVEMENTS

In the 1970s and early 1980s, Manuel Castells analyzed the relation between society and urbanization and defined Urban Social Movements (USM) as “collective actions consciously aimed at the transformation of the social interests and values embedded in the forms and functions of a historically given city” (1983, p.xvi). In this perspective, USM connects social struggles with the space where they are experienced, taking into account the specificity of historical processes at play. According to this author, these civil initiatives are not the only ones that contribute



Source: Christian Mang (cut from original picture)

to the shaping of urban space, but they are the ones that highlight the production process of the city by society (idem). Also, these mobilizations are considered essential to change the city in the face of “prevailing social interests” (idem, p.318), which are associated with broader dynamics. In other words, to challenge institutionalized and dominant structures that affect the daily life of the city, this type of protest relates both to the immediate local society and to a “world-wide system” (Castells, 1983, p.xviii). Complementary, another characteristic of such movements is that they envisage different structures and new meanings for urban space, thus conceiving an “alternative city” (idem, p.xv).

The role of societal practices in the transformation of the city was also discussed by Henri Lefèbvre. Writing in the late 1960's, his conception of social action targeting urban change required the engagement of society – mainly the working-class - in practices against the commodification of urban life, in favor of their “right to the city” (Lefèbvre, 1996). That is, towards the promotion of the city as “place of encounter, [with] priority of use value” (idem, p.158), rather than spaces of consumption and profit, accessed by a few social groups. Hence, the central argument for social mobilization in cities entailed reversing the injustices produced by the ongoing pattern of urban development. He interpreted the social struggle of his time based on the view of a Fordist city in crisis, in which individuals were seen as consumers that had their rights based on the “exchange value” (idem, p.155) of social relations they accessed. This was an urban configuration where lives and spaces were organized in order to reproduce the dynamics of production in course. In this way, some places concentrated some social groups and denied the participation of others, according to their class and the role it involved in the production system. Thus, the author was looking to an urban society that was becoming more and more divided (specialized) instead of integrated because of its focus on consumption, as much in terms of technology, urban planning, work and knowledge. Given his context, social movements would then involve the participation of workers – the class subjugated to that condition – in order to modify the urban reality imposed to them. Such engagement was considered part of the battle for a “right to the city”, which in turn was seen as a joint effort (Lefèbvre, 1996, p.156) - from civil society, intellectuals

and left-wing political parties - to put into practice an alternative reality that could counter the dominant city model.

For Castells and Lefèbvre, the mobilization of society on urban space involve the imagination of another possible city – referred to as “utopia” (Lefèbvre, 1996) or “alternative city” (Castells, 1983) - which must be submitted to practical experimentation through the willful action of social forces on space. Both authors derived their definitions from the historical context in which they were immersed. That is to say, the industrial cities of western countries that were the scene of a series of protests during the 1960s and 1970s. Thus, when these concepts were developed they contemplate a city in the process of “destructuring”, as a manifestation of “the depth of phenomena, of social and cultural disintegration” (Lefèbvre, 1996, p.156). While Lefèbvre purposed that overcoming such urban crisis should include participation of working-class, intellectuals and parties, Castells (1983) concluded that urban social movements were then organized around three main topics: “collective consumption”, “cultural identity” and “local government” (p.xviii).

As cities, society and the dynamics of production, communication and consumption have changed greatly since then, the characteristics of protests and the issues they address have also been affected. Concerned with analyzing recent urban social movements, German researcher Margit Mayer reviewed the two perspectives mentioned above and assessed their validity and application in contemporary uprisings. Regarding the USM concept (Castells, 1983), Mayer (2006a) considers that it has partly lost its validity because it targeted a particular mode of urban development, which is no longer the same. However, it was able to identify the lines of conflict that still permeate the major urban contests of our time (p.204). In other words, the topics of collective consumption, the contesting of state power, and “the significance of cultural issues (...) have remained crucially relevant to urban social movements, even while the context has dramatically transformed” (idem). Moreover, she argues that it left a legacy regarding the methods of studying urban social movements, i.e. to combine the analysis of internal dynamics of social movements with the context where they emerge “while paying attention to how the

contemporary conjuncture shapes our own research agenda and analytical models” (idem, p.205).

In relation to the right to the city, despite the differences from the original context, Mayer (2012) argues that the idea continues relevant for urban social movements until today. The author notices that the term has acquired several meanings and evolved according to the political and economic forces that have shaped the urban space since the 1960s. She says that over the decades the concept was appropriated in two main ways. On the one hand, it was absorbed by formal institutions and turned out to be a slogan to participatory strategies of governance in many cities, then representing a formal recognition of the right to participation of citizens in a city “as it exists” (2012, p.77). In this process of speech co-optation, the agenda of engagement proposed by Lefèbvre was incorporated in neoliberal policies. On the other hand, some contemporary urban social movements have used the “right to the city” as a motto in the fight against the injustices produced by this same regime of governance, in a claim for the right to “another city” (idem, p.71).

Furthermore, since both theories were formulated, “urban movements have gone through a series of cycles that have transformed their goals, strategies, organizational structures and action repertoires” (Mayer, 2006a, p.203). Along these changes, two trends prevailed. First, the state has developed partnerships with local movements, implementing urban policies that make “use of [their] territorial identity” (idem). Second, urban mobilizations have gathered older movements and new ones around coalitions against “privatization and “welfare dismantling”, thus using “flexible action repertoires, fighting both inside the negotiation rooms and in the streets, applying pragmatic as well as militant strategies, but always being media-savvy and professional” (idem). Observing specially Western cities, Mayer argues that a key feature of contemporary movements is that they address the constraints of urban life in a context of neoliberal economy and austerity policies (Mayer, 2016). Consequently, the current arrangements, goals and actions of social movements reflect the effects that such scenario have on several groups of urban society.

As reported by Mayer (2012), uneven pattern of development has recently reached not only the historically disadvantaged population but also members of middle class. Neoliberal regime has made the loss of rights tangible “also for comparatively privileged urban residents, whose notion of the good urban life is not realized by increasing privatization of public space, in the ‘upgrading’ of their neighborhoods, or the subjection of their everyday lives to the intensifying interurban competition” (Mayer, 2012, p.63). Hence, the advance of inequality into a broader socio-spatial context has been motivating the formation of coalitions among various social movements, which in turn have been raising a wide-ranging agenda for urban change (idem). In the German context, the work of Novy and Colomb (2012) highlights the emergent role of creative class in the process of urban insurgence. By studying cases in Berlin and Hamburg they conclude that both examples were “pointing towards new forms of activism [practiced] by precisely those groups around which policymakers orientate so many of their policies. Significantly, these groups are against the policies formulated in their name and the market-based urban development agendas” (p.19).

Complementary, Uitermark et al. (2012) frame urban social movements as constitutive products of cities. According to their arguments, cities are socially dense, large and diverse, which together generate conflict relations in its spaces. In this landscape, major contests occur in a dialectical process involving the dominant power, which include the state and its partners, and civil society. In this interaction, urban activists figure as actors breeding contentions in an urban space controlled by the maintainers of “order and power” (Uitermark et al., 2012, p.2446). However, they point that many social movements get locked in the local scale of their fights, whether because they are quelled by local state strategies of control or because they do not articulate the claims beyond local issues. This figures as a barrier to reach structural change, thus authors defend a broader horizon of social contention, one that overcomes the city scale. In this sense, one should look at the social context of a determined city to find opportunities of re-scaling the causes across movements and geographies (idem, p.2552).

Besides this conjuncture, Shaw and Graham (2017) point that “urban society is now materially produced as a function of networked informational circulation” (p.908). According to their study, in the current course of “urbanization of information” (idem), which is implemented by tech-companies as Google, information itself “circulates as a commodity” (Shaw & Graham, 2017, p.909) in the urban space. This means that in the process of continuing digitalization, data flows in the city based on its “exchange value” instead of “use value” (Lefèbvre, 1996). In such a situation, the infrastructures of communication, as those of internet, add to the dynamic of uneven urban development. So, Shaw and Graham (2017) advocate that contemporary urban social movements must - and tend to - include the struggle for appropriating and managing the communication resources in the right to the city agenda.

Adding to it, since the initial descriptions of USM, Castells has been investigating the social transformations triggered by new information and communication technologies (ICT). According to him, the social and power relations raised from the vast deployment of ICT have been providing for the establishment of a “network society” (2000). Likewise, the new patterns of interaction brought opportunities and challenges to urban social movements (2009; 2015). In his recent definition, he locates social movements as social actors that counter-power the dominant, institutionalized structures of society (Castells, 2015, p.5). The power of prevailing structures comes from two sources: the first one is violence - a state monopoly - and the other, a more stable one, is persuasion, which means “the construction of meaning in people’s mind” (idem). As the latter is exercised through communication, the fight to create new meanings - thus challenging the dominant structure - requires the appropriation of the networks of communication and information (idem, p.9), particularly the Internet.

Although urban space is not central to his recent theory, as with the definition of USM, Castells (2015) reaffirms that contemporary social struggles are linked to both local and worldwide structures of communication and power. Moreover, they resonate with the current configuration of social relations, so they are network movements and

their structure develops in a hybrid of online and offline spaces. This way, they are “not a single entity, but multiple streams [of individuals] that converge into a diverse challenge to the existing order” (p.190). This author also argues that a fundamental point to current fights is having “autonomy of communication”, because it is “what enables the movement to relate to society at large beyond the control of the power holders over communication power” (Castells, 2015, p.11). In line with this, some trends of these mobilizations are: refusal to associate with political parties or the mainstream media, rejection of formal organization and leadership, as well as internet use and local meetings for debate and decision making (idem, p.4).

From the definitions and studies considered, the concept of urban social movements is here understood as collective actions that confront the social injustices produced throughout the urban development processes, in a context of neoliberalism and digitalization, with the objective of changing reality and building another possible city. The main condition that differentiates these from other social movements is that these struggles directly address the forms and functions of urban space. According to trends examined (Castells, 2015; Mayer, 2016; Novy & Colomb, 2012), such contemporary mobilizations are organized in networks and coalitions, appropriating of internet and media to spread its causes. They commonly refer to the mechanisms and consequences of a profit-based city – e.g. evictions - and aim at building more democratic and socially just spaces.

1.2 | THE CAMPAIGN AGAINST A GOOGLE CAMPUS

The protests rejecting the installation of a Google Campus in Kreuzberg, Berlin, took place mainly between December 2016 and November 2018, although some of their activities extended for another year. More than a one-off event, the assumption is that this case highlights the struggles that permeate the daily lives and spaces of that urban population, which includes gentrification processes and the influence of

many tech-companies. In this context, motivations for fighting might extend beyond the installation of the startup campus itself. In order to obtain an informed analysis to discuss this, the section is dedicated to understanding the development of this campaign. Thus, it examines the movement’s structure, concerns, action tactics, interactions, as well as the values its actors have developed and disputed throughout the process. Inspired by Castells’ studies (1983; 2015), it attempts to comprehend:

- how the movement interacted with urban space and internet;
- how the process of mobilization developed;
- “what elements account for their internal structure and historical evolution” (1983, p.xvi).

2.0.1 | RESOURCES AND METHODS

Given the campaign period, by the time this research began resources for analysis were already limited to events and narratives from the past, which meant that observation of mobilization in action, as in demonstrations, was no longer possible. However, this also provided methodological opportunities because the battle had already produced results in the city, i.e. the installation of the campus had been prevented. This way, data collection involved the direct observation of the context (neighborhood) after the confront, pictures, documents and other contents provided online, as well as face-to-face interviews. Concerned with apprehending the meanings and values shared in the campaign, this part of the work was developed mainly through discourse analysis operations. In addition, for verifying the internal structures of this movement, social network analysis tools are employed.

The first step in this process was to check the public content available in the internet. It consisted in identifying the resources used to communicate this cause online (Table 1). Initial findings showed that digital assets are managed by different groups and counts with campaign blogs, wiki page and accounts on social media. While the websites announce the claims and contains links to the other pages, a sum of the information produced by the diverse groups is assembled on the Wiki (n.d.). Complementary, some writings are stored in an

online anarchist library (n.d.) and on the website owned by the group managing the mobilization’s account on Twitter (TOP B3rlin, n.d.). Most of content in these pages is written both in English and German. Although the mobilization has its roots in the district, meaning that its primary social networks are grounded on relations of spatial proximity, the online content provided for much of the analysis brought forth, this was largely due to the availability of this resource and the methodological opportunities arising from it.

Webpage name	Type	Language	Release	Followers	Posts
Fuck Off Google	campaign	EN/DE	n.d.	-	-
Google Campus & Co verhindern	campaign	DE	10-2017	-	70
Google ist kein guter Nachbar	campaign	DE/EN	12-2017	-	-
@FuckOffGoogle (Mastodon)	social media	EN/DE/FR	12-2017	1600	886
@counter_campus (Twitter)	social media	DE/EN	01-2018	403	469
Fuck Off Google Wiki	Wiki	EN	11-2017	-	-

Table 1 List of online resources

Simultaneously, throughout the research, there were many visits to the site, including a visit to the district museum. These were opportunities to look at posters glued to walls or distributed locally, banners and flags hanging from windows, to detect community meeting places, to observe people’s use of spaces, and to pay attention to various other spatial elements that could tell the story of everyday practices and shared meanings in the vicinity of the disputed location. On some occasions photographic records were made, on others only notes were written about the events seen. The purpose of these field visits was to capture at least some of the components that make up the relationship and communication of the local population with their environment. This procedure has therefore helped to understand the local context of the social movement studied.

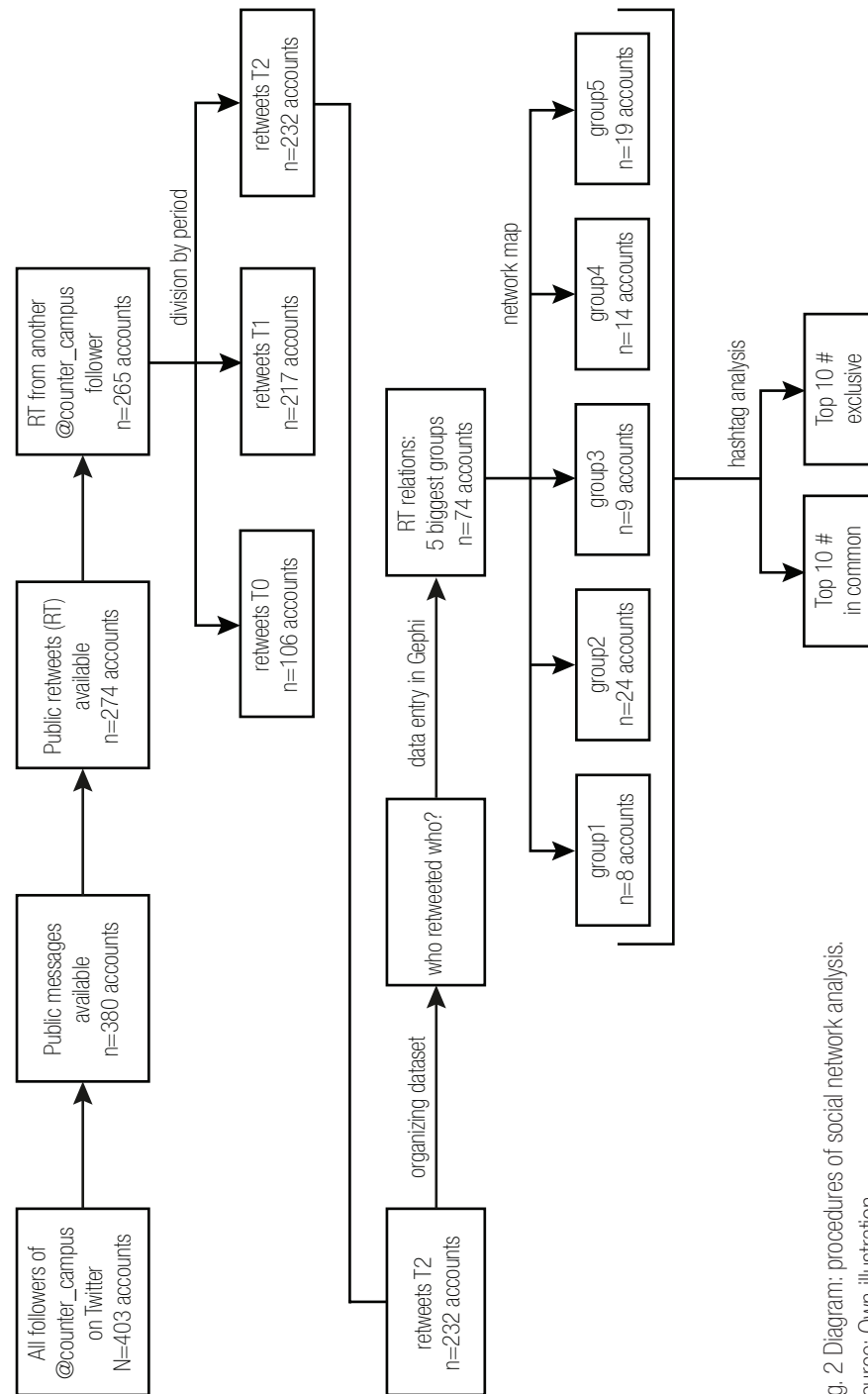


Fig. 2 Diagram: procedures of social network analysis.
Source: Own illustration

Analysis of the online content can be divided in three parts (Table 2). The first one consisted in examining the discourses of the different campaign blogs. At this stage the content was analyzed according to topics approached and campaign material available to download (posters, stickers, etc.). The aim was to understand the cause and the ways of publicizing it, as well as the convergences and divergences between campaigns. The second part involved the review of social media accounts, which counted on the observation of profile descriptions, public messages, pictures, links, invitations and hashtags used. This phase contributed to reveal patterns of communication and provided for a comparison of the content discussed in the two accounts. The last part concentrated on social network analysis. Assuming that campaign followers on social media are potential participants in the movement, the third part comprised the study of semantic relations developed by followers of the campaign on Twitter (@counter_campus, n.d.). In doing so, it tried to detect the values and concerns around which the actors formed groups and developed communication patterns. That is, this part added to the comprehension of internal structures and topics mobilized. In parallel, the wiki's content provided resources related to documentation and photos, thus allowing to understand the historic of events occurred.

Phase	Source	Procedure	Outcome
1. Campaign Blogs	Fuck Off Google Google Campus & Co verhindern Google ist kein guter Nachbar	content analysis	campaign discourses, convergences and divergences
2. Social Media Accounts	@FuckOffGoogle @counter_campus	content analysis	patterns of communication, topics, actors and relations
3. Social network	@counter_campus followers	network analysis	map of semantic relations

Table 2 Online resources: phases of analysis

Social network analysis required many operations (Fig. 2) and relied on the supervision and support of data researchers from the Centre Marc Bloch, in Berlin. It started with the sampling definition, which

demanded the assessment of which publicly available information – from @counter_campus followers - was needed for the analysis. Then, in order to identify in which topics they were actively engaged, as well as how that group of followers related among themselves, public data about their retweets (RT) was collected. This choice is due to the fact that RT demonstrates a more active involvement in a topic than likes, for example, while still providing the conditions to check the links between followers. The period for RT collection was established on the basis of availability at the time the data were retrieved, resulting in a time sample from January 2017 to November 2019. Once data was collected, the sampling had to be divided in three sub-periods (Table 3) because the information available was not equally distributed among the users. This means that for some users it was possible to analyze all the RT from that period while for others older messages were missing. Consequently, the most recent data set (T2) was selected for the next steps of analysis because it contained information about more users, which indicated a higher reliability of this sample among the three.

Sample	Period	Description
T0	From Jan. 2017 to Nov. 2017	Period preceding the release of online campaigns
T1	From Dec. 2017 to Dec.2018	Active period of online campaign and demonstrations
T2	From Jan. 2019 to Nov. 2019	Period following the Google campus cancellation

Table 3 Division of dataset by period

Then, the sample T2 was again filtered, this time leaving just the RT coming from another account in that group, i.e. excluding all RT not reproduced from another follower analyzed. Once the data set was ready to analyze the patterns of communication (who retweeted who) it was inserted on Gephi, a software of network analysis. At this point another filter was applied and left for analysis just the most active users, a measure employed to strengthen the accuracy of results. The ensuing network map indicated an internal subdivision of users, which were grouped on the basis of relations of RT exchange. Then, two parallel steps were taken: the

Twitter profile of each follower present in the network map was briefly checked, and the hashtags available in the RT were grouped. These final procedures provided for identifying the themes that each subgroup of followers were more attached to.

Although the content on the Internet has also allowed the analysis of offline practices, much of it has been studied in greater depth through the field visits and interviews. At the moment when the online resources were identified, all the campaign channels were contacted. In this occasion, activists were invited to a face-to-face meeting, where they would talk about their own perspectives about the mobilization. Additionally, individuals engaged in this fight were reached through the mediation of other researchers based in Berlin. In response to these attempts, three persons volunteered to talk. Thus, according to the feedback received, three in-depth individual interviews were conducted between December 2019 and January 2020. Language spoken on these occasions was English. The general aim of these meetings was to understand individual perception about the development of mobilization and the impacts that a Google Campus would have in the neighborhood, taking into account the background and references of these actors. Appropriately, interviews were designed as talks guided by (but not limited to) six questions, as follows:

1. What is your relationship with the neighborhood? Do you live, work or study there? For how long?
2. How did you take part in the mobilization?
3. Why would a Google Campus be a problem for Kreuzberg?
4. What were the moments or events that you consider to have been most relevant to this mobilization? Why?
5. Do you have references - from places, documents or people - that I can consult to better inform me about the movement and its causes?
6. And now, are you still engaged in this cause? How do you see Google's retreat?

A concern raised during interviews was anonymity. Two out of the three respondents emphasized that they wanted their identity out of

the research writings. According to their arguments, this requirement derived from two connected concerns. First, none of the interviewees wanted to figure as prominent members speaking on the behalf of the whole movement, as a matter of avoiding hierarchy and centralization of discourse. Secondly, because they appreciated anonymity, both as individual and collective value (referring to mobilization). As a consequence, nicknames were assigned to these two respondents and at his request, the third interviewee is mentioned here by his real name.

2.0.2 | ONLINE AND OFFLINE ELEMENTS

Together with campaign blogs, two specific accounts on social media show how the fight was communicated online. On the platform Mastodon.social, the profile *@FuckOffGoogle* was the main representative of the movement. Conforming the content shared in it, activists talked on Mastodon primary in English, more than 80% of their toots (public messages) are in this idiom. German was only the third more frequent after French, which was the language of about 10% of messages. In total, the profile has posts in five different idioms. Part of the information in it relate to invitations to meetings and demonstrations, or report pictures and videos from events against the Campus. The other part corresponds to information about cyber activism topics. Among the hundreds of toots that speak exclusively about digital concerns, users discuss alternatives to Google services and open source applications, as well as decentralized ways to reclaim control over personal data and increase one's privacy online. In other words, the account on Mastodon engaged actors with a more specialized knowledge on internet and as such they were aware of the implications of Google's technology, practices and tools.

On Twitter, the movement was most represented by *@counter_campus*, an "anticapitalist project against the Google Campus Berlin" (n.d.). Comparing to *@FuckOffGoogle*, it had considerably less adherence in terms of followers and produced fewer public messages. However, the content on this page reveals greater connection to local collectives that fought the Google Campus. Some tweets, mostly in German, invite to meetings, demonstrations and refer to the movement's campaign blogs.

There are also dozens of messages in support of several protests in Berlin, usually related to anti-eviction agendas. Additionally, several users are retweeted quite frequently by this account, which allows us to observe that there was a web of groups involved in this struggle. Though the appropriation of these channels is seen as a means to engage wider audiences, discuss topics and inform events, the platforms chosen for this purpose are also relevant. Mastodon.social and Twitter are quite similar social networks that are based on micro-blogging, yet the former figure as a decentralized alternative to the latter. The preference for these media over Facebook, for example, informs a greater focus on developing ideas and discussing issues than on promoting the personal image of each user involved. According to data accessed, information about the mobilization on Facebook was restricted to occasional invitations to events, which were shared only through the pages of pre-existing collectives that supported the cause.

Campaign blogs presented diverse perspectives about the fight. Fuck off Google (n.d.) had a focus on technology. Their main page is still dedicated to providing a summary of the topics that made up the campaign agenda. The other sections contain brief explanations of the claims as well as criticism of Google's practices. There are also invitation to regular meetings in a local library and a link to the Fuck off Google Wiki page (n.d.). From another angle, *Google ist kein guter Nachbar* (GkgN) was a campaign that highlighted the problematic of gentrification and displacement, though not limited to that. Its main page displays a map of neighbors (individuals, collectives and small businesses) that have supported the cause, suggesting that it had a particular appeal towards strengthening neighborhood relationships. Other sections of this website also contains the campaign description, material for download (posters, brochure, flyers) and a presentation of collectives involved. Finally, the initiative *Google Campus & Co. Verhindern* (GCV) communicated its ideas in a different format. Their website is composed by many blog posts with invitations to events and demonstrations, mentions and support to similar struggles in the neighborhood, as well as reflections about the practices of Google and other tech companies. In addition, there is a section where national and international news about the mobilization is documented. In terms of how each of the blogs and pages referred to the



Fig. 3 Local newspaper against the Google Campus (ed. #1).
central article "Der Drang zu bleiben"(The urge to stay).



Fig. 4 Local newspaper against the Google Campus (ed. #2).
central article "Mensch oder Maschine" (human or machine).



Fig. 5 Local newspaper against the Google Campus (ed. #3).
central article "Die Technologisierung sozialer Fragen" (The technologization of social issues).

Source of Fig.3, 4 and 5: interviewee #5 own collection.

others, Fuck off Google, the Wiki and the Mastodon account demonstrate direct connection to each other. Besides the hyperlinks, in all three pages the predominant language of communication is English, while the other campaigns share content mostly in German.

The range of online resources indicate that the mobilization have appropriated of internet in decentralized and independent ways. That is, despite the use of some mainstream social media, most part of the campaign developed through the employment of diverse and alternative media, such as blogs, videos and the account on Mastodon. In parallel with communication in the digital sphere, a set of printed material was produced as a means to inform locals about the mobilization. This is the case of three editions of a local newspaper, “Shitstorm – Anarchistische Zeitung”, that presented reflections on the problematic of Google, startups and the project for Kreuzberg (Fig. 3, 4 and 5). Furthermore, between May and July 2018, three manifests were released in printed and online versions. The brochure “Keine guten Nachbarn. Google, Factory and Co.”(NoGoogleCampus, 2018) comprised an effort to expose, using local examples, how the startups and smart technologies



Fig. 6 Posters affixed to district walls: invitation to noisy demonstration.

Source: wiki.fuckoffgoogle.de

promoted by Google are intertwined with the processes of displacement and exploitation in Berlin. Next, @counter_campus released a booklet called “do the red thing” (TOP B3rlin, 2018), in a reference to the motto “do the right thing”, which is used in the code of conduct of Alphabet Inc. (Google’s parent company). The publication collected reasons to fight, explained the origins and consequences of platform capitalism and outlined the initiative’s agenda. Third, a more detailed account on Google infrastructure, strategies and projects was presented in the brochure “and the world shall become Google – Google’s digital attack and its consequences” (Anonymous, 2018). The issue also gathered reasons and proposes on how to fight the Google Campus in Kreuzberg. These publications, along with pamphlets, stickers and posters became available to general public in some local shops and community spaces.

Demonstrations against the Google Campus occurred in various formats. There were recurring rallies taking place every first Friday of the month, between February and October 2018. These were noisy demonstrations in front of the prospected building (Fig. 6 and Fig. 7), occasions when individuals were invited to “bring friends, pots, pans,



Fig. 7 Demonstration against the Google Campus in front of the Umspannwerk.

Source: wiki.fuckoffgoogle.de



Fig. 8 Facade of the Umspannwerk after protesters sprayed and threw paint balloons.

Source: <http://googlecampusverhindern.blogspot.de/2017/12/27/>

whistles and other noisy implements” (Fuck Google Wiki, n.d.) as a resource to make their claim sound louder. Another means of annoying the tech-giant was used in October 2017, when people threw colored paint balloons at the building (Fig. 8) and painted its facade with the saying “Fuck Google” (Google Campus & Co. verhindern, 2017, October 21). In addition, there were parades organized by specific collectives that participated in the movement. In such events, protesters with banners and posters used to gather in front of symbolic places of resistance and then made a route through the neighborhood towards the disputed *Umspannwerk*. Activists also joined demonstrations organized for other purposes, but in which the themes addressed were close related to the motivations that led them to reject the GC. Examples are the protest against the awarding of Jeff Bezos (owner of the Amazon group) for his business model and the manifestation that gathered anti-eviction collectives at Potsdamer Platz in April 2018 (Make Amazon Pay, 2018, March 20; Google Campus & Co. verhindern, 2018, April 4).



Fig. 9 Invitation to demonstration walking around the neighbourhood, on March 3, 2018.

Source: <http://googlecampusverhindern.blogspot.de/stuff/>



Fig. 10 Event “Kick Google aus dem Kiez”, on June 14, 2018.

Source: wiki.fuckoffgoogle.de

Likewise, events for planning, organization and debate were frequent and varied. Face-to-face meetings were held every month at the Anarchist Library (Kalabalik), which is located in the same block of the planned Campus. During 2017 these gatherings took place only once a month but as the mobilization gained strength and visibility they became more constant, occurring every two weeks until October 2019 (Fig. 11).



Fig. 11 Invitations to the Anti-google Café face2face at Kalabalik.

left: meetings on the second Sunday of each month (2017)

right: meetings on the second and fourth Saturday of each month (2018)

Source: Shitsstorm – Anarchistische Zeitung #1 and #2, from interviewee #5 own collection.

Among the practices documented, these conversations called “Anti-Google Café” seem to have been crucial for the engagement of the local population, especially during the first year of struggle. Yet these were not the only meetings that supported the development of this mobilization. Over time, several initiatives and collectives have organized events in order to: exchange information about the Campus; discuss the ongoing and potential challenges brought by the Internet companies installed in the city; debate ways to counter the emerging startup culture, as well as to plan the next actions to be taken. For instance, in November 2017 members of the local collective Lause Bleibt, together with other groups, set up an event called “Kreuzberg gegoogelt” (Kreuzberg googled) in which they aimed at discussing how a GC works, which stage its project implementation was at and how it could be prevented (Fig. 12). Also, organizational and informative debates happened at other places such as the New York im Bethanien and the SO36 (Google Campus & Co. verhindern, 2017, December 4; 2018a, September 2). Such variety of offline discussions were an important resource for continuous engagement, which is further discussed in chapter 5.



Fig. 12 Invitation to the InterLause #1 – Kreuzberg Gegoogelt, on November 1, 2017

Source: <https://www.bizim-kiez.de/event/kreuzberg-gegoogelt-interlause/>

Most of the movement's actions were developed through offline practices, that is, from meetings and debates, occupation of spaces and personal interactions that make up everyday life. Together, these methods led to a continuous exchange of information about the struggle in the neighborhood. Accordingly, all interviewees highlighted the importance of pre-existing community relations for the movement's development. For Pageblank - the interviewee who showed the greatest affinity with topics related to technology - success of the protests was particularly due to spatial practices and daily relationships. The activist considers that the campaign outside the internet played a key role in Google's withdrawal, while online resources provided only complementary support. Respondents also agreed that squatting the *Umspannwerk* for some hours in early September 2018 was a decisive moment for the mobilization. Besides this important event, they mentioned that the struggle also relied on the appropriation of public spaces in diverse formats. From meetings and demonstrations, posters and stickers glued on facades and shop windows, banners hanging from windows to the graffiti that marked the walls of Kreuzberg and its surroundings. According to them, these kinds of spatial occupation were not a novelty to local community. Over time, residents have been developing their own means of communication, which count on collective and autonomous production of knowledge throughout living spaces.

Due to the cancellation of the startup campus, the last noisy demonstration in front of the *Umspannwerk* happened in October 2018. Although activists interpreted Google's withdrawal from the neighborhood as a victory for the residents, initiatives also recognized that the tech-giant had not given up of Kreuzberg (NoGoogleCampus, 2019). While the campaigners have published notes celebrating Google's retreat, some also criticized Google's decision to hand over the space for non-profit organizations. They argued that Google's preference for charity institutions was an attempt to wash and renew its progressive image (Fig. 13), which had been soiled by that uprising (GoogleCampus & Co verhindern, 2018, November 15). In addition, groups considered that the decision could be a strategy to calm protests, and that the project could be revived at a more convenient time. Such interpretations motivated these groups to keep the regular meetings as a means of articulating continued



Fig. 13 Poster criticizing Umspannwerk's handing-over to Karuna and Betterplace.

"Google - Brilliant Whitewashing (with Karuna & Betterplace)
For a radiant image despite all the mess!
- Protects against protest and resistance
- In addition to the washing agent"

Source: <https://twitter.com/freundeskreisv/status/1105791671487344640/photo/1>

resistance, thus avoiding a future return of the project. Activists then have redirected their efforts, focusing on observing the organizations installed at the *Umspannwerk*, Karuna and Betterplace, and discussing the presence of other tech-companies in the city.

In terms of movement's development over time, the material presented in this section provided for the identification of three main periods of activity, which are similar with the periods generated in the process of network analysis. The first one corresponds to a phase of engagement, when local individuals and collectives were grouping together, frequent meetings began to take place and claims were outlined. The next one represent the most active phase of mobilization, when demonstrations happened, accounts on social media were created, campaign booklets were released, people from other districts and cities joined the cause, new alliances were established and the building was briefly occupied. Then, after Google announced the retrieval of its plan, started a time of transition when activists stopped the manifestations, reduced the communication on social media and renamed the recurring meetings at Kalabal!k as "Post-Anti-Google Café face2face" (Fig. 14).

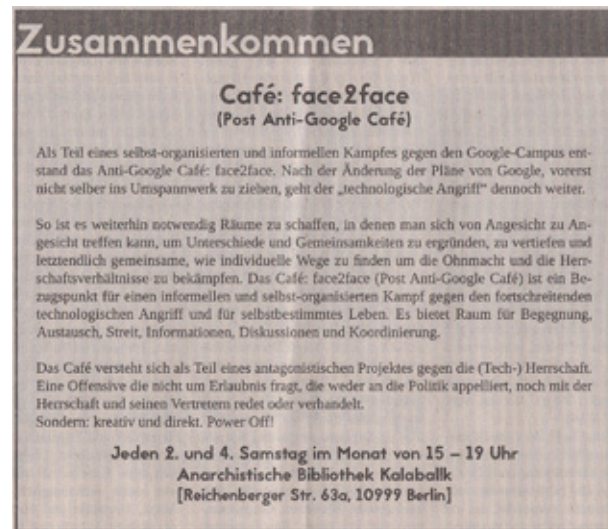


Fig. 14 Invitation to the Post Anti-google Café face2face at Kalabal!k.
Source: Shitstorm – Anarchistische Zeitung #3, from interviewee #5 own collection.



Fig. 15 Banner hanging from windows in the district.
Source: wiki.fuckoffgoogle.de



Fig. 16 Banner at the entrance of a building.
Source: wiki.fuckoffgoogle.de



Fig. 17 Banner in front of the Umspannwerk Kreuzberg.
Source: wiki.fuckoffgoogle.de

Fig. 18 Urban intervention "Mach mal, Google aus".
Source: wiki.fuckoffgoogle.de



Fig. 19 Campaign and event posters affixed around the neighborhood.
Fig. 20 Sticker from the "Fuck off Google" campaign.
Source: wiki.fuckoffgoogle.de

Fig. 21 Posters from the "Google Campus & Co verhindern" campaign.
Source: wiki.fuckoffgoogle.de





Fig. 22 Found in Berlin: graffiti "Fight the power, fight Google".
Source: wiki.fuckoffgoogle.de



Fig. 24 Found in Berlin: graffiti "Shutdown Google".
Source: wiki.fuckoffgoogle.de

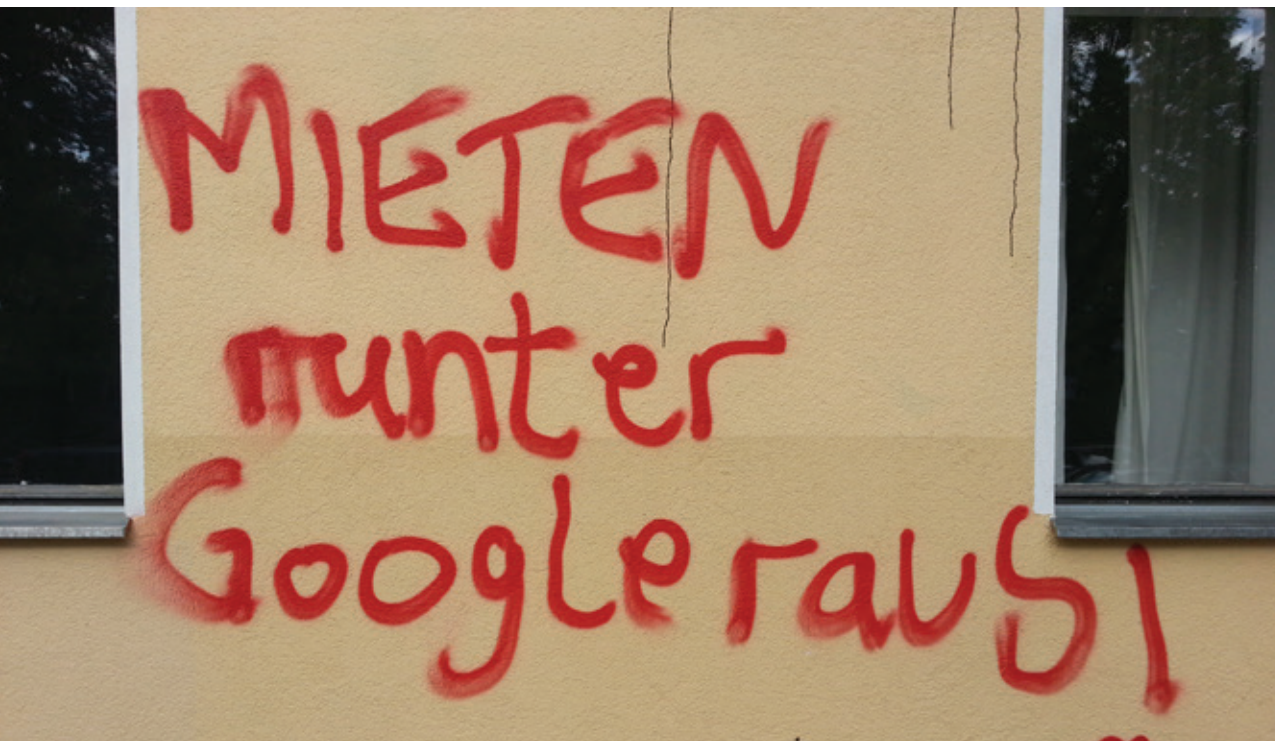


Fig. 23 Found in Berlin: graffiti "Mieten unter, Google raus" (Rent below, Google out).
Source: wiki.fuckoffgoogle.de



Fig. 25 Found in Berlin: graffiti "Freiheit wird erkämpft, nicht gegoolet" (Freedom is fought for, not googled). Source: wiki.fuckoffgoogle.de

2.0.3 | STRUCTURE OF ACTORS AND CLAIMS

Online and offline elements show that the movement was composed of four campaigns: *Google Campus & Co. verhindern*; Fuck off Google; *Google ist kein Guter Nachbar*; Counter Campus. Although some groups were dedicated to organizing and producing material for only one of the four, supporters in general did not relate exclusively to a single initiative. On the contrary, the movement was structured in a connected way, so that actors from different campaigns referred to each other frequently, developing the mobilization in coalition. Interviews reinforced this feature. Respondent #5 collaborated in the first campaign, Pageblank was most involved in the second one and Konstantin Sergiou was active in the third, yet they have mentioned all the campaigns listed above. Furthermore, identifying campaigns does not necessarily mean that all participants were involved in one of them, blog posts reveal that some groups joined the cause without sticking to one or other initiative (DeliverUnion, 2018, March 15; Friedel 54, 2018, March 27). Consistent with such arrangement, no leadership was observed. Despite the participation of pre-existing community groups, respondents endorsed that the movement did not depend on representatives to lead its actions. Some of the collectives involved had their own spokesperson for this cause, but these were not leaders. Thus, they organized without announced hierarchy, which is coherent with their defense of decentralized networks (Fuck off Google, n.d.).

Campaigners have defined themselves as anticapitalists (@counter_campus, n.d.), a group of people from anarchist, autonomous, radical left-wing, emancipatory, libertarian and communist backgrounds (Google Campus & Co. verhindern, 2018b, September 2) and as “a network of engaged neighbors from Kreuzberg, Neukölln and Treptow, as well as activists from the initiatives Lause bleibt, GloReiche Nachbarschaft and Bizim Kiez” (NoGoogleCampus, 2019). The coexistence of multiple groups against the Campus indicates that individuals had variable affinity with the topics they fought for. In the same way, names chosen for the campaigns suggest differences in approach to their opponent. As interviewee Pageblank commented, the name “Fuck off Google” refers

to an event that happened in San Francisco in 2013, when local groups blocked a bus that daily took Google employees to the Silicon Valley (The Invisible Committee, 2014). The name then make a direct criticism to the tech-giant. Already the use of the words “counter” and “verhindern” (prevent) in the other campaigns highlight the position of resistance. While the former can allude to a power-holding opposition, i.e. counter-power Google, the latter underlines an active operation to ensure the Campus would not be implemented. Finally, the initiative *Google ist kein guter Nachbar* emphasizes the neighborhood perspective. By using the word “Nachbar” (neighbor) it mainly addresses “relations of immediacy” (Lefèvbre, 1996, p.112). Accordingly, they have called local residents to stand together as a neighborhood and fight together against the repression of Google & Co. (NoGoogleCampus, 2018, p.30). Together, the variations in definitions and approaches reveal that a diversity of people, with different perspectives, permeated the movement.

Hashtag	Accounts using it
#Berlin	100,0%
#Mietenwahnsinn	93,2%
#Neukölln	91,9%
#besetzen	90,5%
#AfD	85,1%
#Kreuzberg	83,8%
#SPD	78,4%
#Mietendeckel	77,0%
#Antifa	70,3%
#Polizei	68,9%

Table 4 Most shared hashtags in all groups

When considering supporters of the cause on Twitter, social network analysis indicates that nearly a third of participants (32%) assemble into five groups (Fig. 26). According to their most used hashtags, such groups share many themes of discussion (Table 4). For example,

they all refer often to Berlin and the majority have tagged the districts of Neukölln and Kreuzberg. Pro-housing and antifascist topics are also among the most frequent subjects. Yet, the communication patterns show that some hashtags are only used among individuals of the same group (Table 5). Accordingly, each of the verified groups is distinguished from

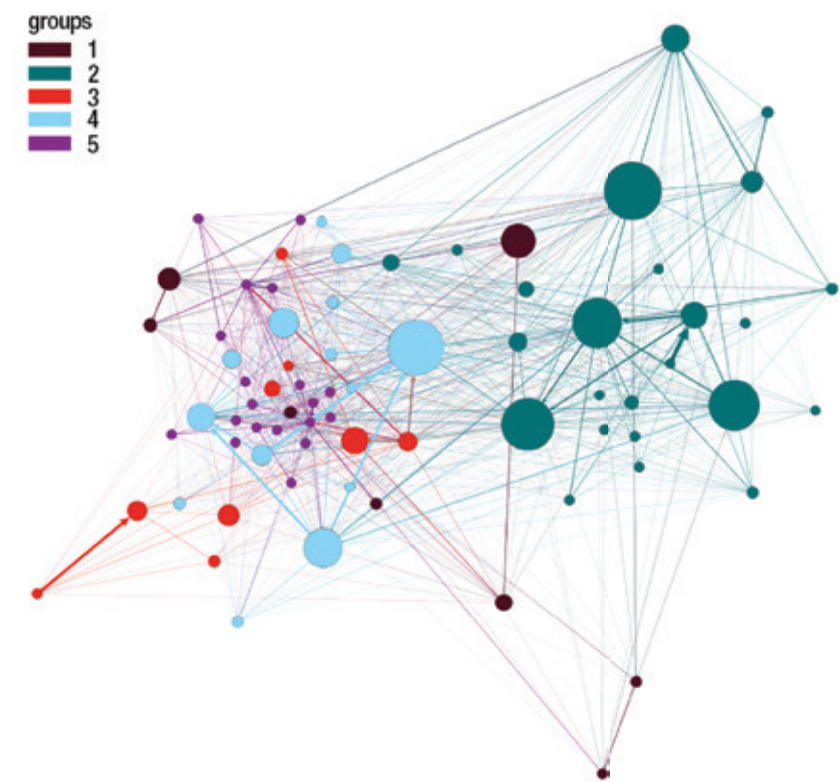


Fig. 26 . Retweets network map.
Description: Nodes represent the followers of @counter_campus and their size on the network map mean the times that a given account has retweeted or has been retweeted by another account within the network. Lines and arrows show who retweeted who.
Source: own map generated on Gephi.

the others by sharing greater affinity with the following themes:

1. Human rights and migration. It is composed by users that discusses particularly anti racism, anti fascism, borders, poverty and social justice.
2. Housing. It is constituted of individuals and collectives that fight mainly for housing policies and anti-eviction measures, contesting often the practices of real-state companies.
3. Workers' rights. It gathers collective accounts, including students, but no individual users. In general, the subjects addressed involve work conditions, strikes, unemployment assistance, student tax reductions and social protection measures in general.
4. Squatting. Comprise collectives (of tenants, neighbors and artists), as well as accounts of collectively managed spaces in Berlin and related activists. They defend initiatives that promote self-determination and discuss at most anti-discrimination and anti-eviction actions.
5. Anti-capitalism. Individuals and collectives who show more affinity with May day protests. They also speak of anti-fascism, class struggle and techno-dystopia. Most of them display anarcho-communist flags in their profile pictures.

group 1	group 2	group 3	group 4	group 5
#Deutschland	#DeutscheWohnen	#solidarität	#syndikatbleibt	#Rigaer
#unteilbar	#besetzen	#wedding	#RummelsburgerBucht	#Halle
#Sachsen	#Enteignung	#Jobcenter	#Ostkreuz	#noNazis
#NSU	#Mieten	#Wedding65	#meutereibleibt	#1MAI
#EU	#Gentrifizierung	#Tvstud	#G17a	#fckafd
#Lübcke	#Wohnen	#Streik	#potsebleibt	#Spandau
#Menschenrechte	#Vonovia	#HartzIV	#Padovicz	#Rheinmetall
#Polizeigesetz	#Friedrichshain	#Amazon	#Potse	#R1MB
#DDR	#Akelius	#Armut	#HambiBleibt	#NoFundis
#Maaßen	#Airbnb	#Wombats	#Friedel54	#hal2007

Table 5 Exclusive hashtags most used by each group

As this data highlights, motivations for fighting the Google Campus were intertwined with several issues that are “perceived and lived by those who inhabit” (Lefèbvre, 1996, p. 152). Accordingly, for a great number of activists the major reason was linked to the model of urban development in course, which implied that in Kreuzberg there was not only Google but many other tech-companies that push gentrification and technologization of work forward (Google Campus & Co. verhindern, 2018, March 3). In such perspective, neoliberal policies were the core problem, thus the tech-giant would be a mere successful and powerful player in the gentrification process, not its trigger (TOP B3rlin, 2018, p.11). At the same time, some were particularly inspired by the urgency in avoiding the commodification of the neighborhood’s identity, which would occur in case a startup culture prevailed in the area. For them, Google’s goal in having a campus there would be to profit from mining the identity of this rebellious neighborhood, which is seen as a source of creativity (Google Campus & Co. verhindern, 2018, November 15). Still, for other participants the main impulse came from the potential long-term effects that the processes of digitization can bring, in which Google has a leading role. According to them: “many of the residents living around the new tech sites primarily seem to fear displacement rather than exploitation by the digital world. Nonetheless, the technological attack, by Google among others, is profound and lasting, and concerns us all. That is why we need specific projects to address it.” (Anonymous, 2018, p.21).

Considering what has been reported in brochures, tweets, blog posts, interviews, images and posters (Fig. 27 and Fig. 28), the arguments underlying the rejection of a Google Campus in Kreuzberg can be summarized as follows:

- Gentrification: rather than bringing job opportunities and economic growth, which is the discourse of Google and government representatives, a startup campus would attract other tech companies, expensive shops, cafes and skilled employees to the neighborhood where it settles. It would then lead to the increase of living costs in the area, resulting in the expulsion of existing residents and small businesses. In this logic, the Campus would favor real state speculation, which means that landlords and investors would seek profit from Google’s presence at the cost of evictions and the dismantling of community life.

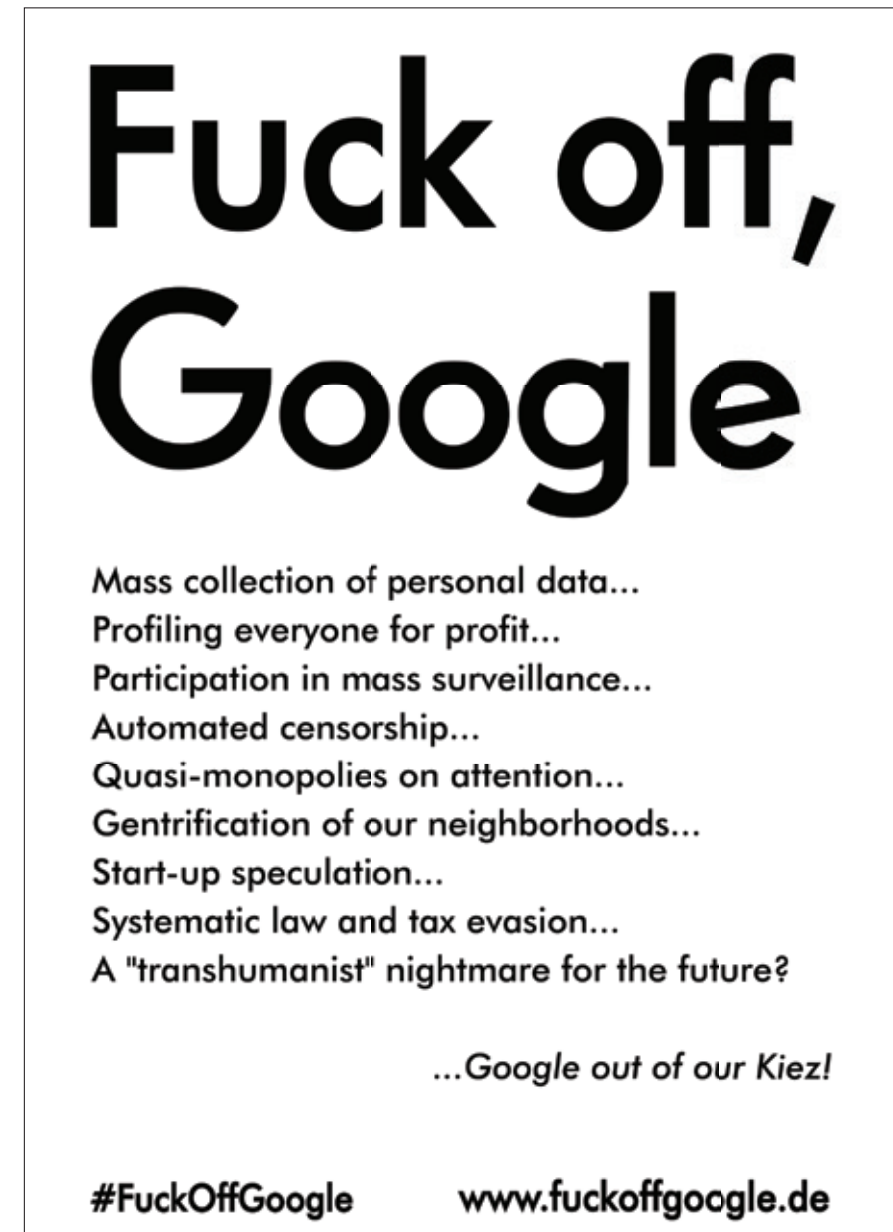


Fig. 27 Campaign poster with the reasons to fight Google.
Source: wiki.fuckoffgoogle.de.

- Precarious work: most of the jobs offered by startups and larger tech-companies, especially the less skilled work, are highly monitored and poorly paid. Many work on a flexible basis (freelance) and have no labor rights. Thus, these entrepreneurs do provide some jobs but under miserable conditions (DeliverUnion, 2018, March 15; NoGoogleCampus, 2018, p.5).

- Tax evasion: the company withdraws instead of bringing in money to the city. As Google diverts part of its gains to tax heavens, it jeopardizes the process in which profit earned in the city return in the form of taxes. In this way, part of the wealth generated is evaded instead of providing for local development.

Fig. 28 Found in Berlin: graffiti "www.bing.com/search?=-fuck+google+gentrification&go"

Source: wiki.fuckoffgoogle.de



- Surveillance and control: the corporation is known for collecting and storing data from its users through many connected web services. Google profits a lot from this by selling targeted advertising to businesses. Also, its services rely on algorithms that assemble, analyses and personalizes our data, delivering recommendations of pages and products according to what we may like, which means that it restricts and manipulate our use of internet. In this "Google filtered world" (Anonymous, 2018, p. 13) one single company centralizes power enough to control one's online experiences. That is, it gathers the means to condition our online behavior in a way that maximize its profits.

- Digital colonization: adding to the issues listed above, Google's presence in cities implies in the spread of its ideas and business model to other fields, which leads to the imposition of an urban life that is controlled by its technological perspective. Besides the promotion of a startup culture, it collaborate with local governments in the development of smart cities and surveillance programs.

Beyond the primary concern with gentrification, such claims have also linked Google's deployment of technology - internet – with its impacts on "old social justice issues (unemployment, poverty, work, security or surveillance)". (Mayer, 2006a, p. 205). Therefore, it suggests that participants gathered around two broad and convergent topics of mobilization. The first one disclosed the fight against the continuous spatial restructuring that leads to gentrification and displacement, while the second covered the technological attack and its implications on social justice, rights and self-determination (Google Campus & Co. verhindern, 2018, August 29). Likewise, in the network analysis, users in groups 2 and 4 (51%) showed greater support to the first theme, as true as the speech of interviewee Konstantin Sergiou. On the other hand, groups 1, 3 and 5 (49%), as well as respondents Pageblank and #5, talked more about the latter subject. The final considerations in the brochure *Keine guten Nachbarn* provide an example of how the two subjects converged in the movement's debates:

The planned campus is not an altruistic project for young founders and all those interested in digital tools in Kreuzberg

36 and surroundings, but part of a strategy by which a global corporation wants to secure its market power: the early promotion of innovation. For this reason, it would also be too short-sighted to criticize the tech industry solely for its role in the urban gentrification and displacement processes. The term digitization is used by politicians mostly without explanation and is not commented on. Its everyday use drown out the urgent need to think and talk about the social benefits of the tech industry - and about the social sustainability of the social vision that this industry promotes. (NoGoogleCampus, 2018, p.23)

Interviewee #5 also shared the perception that participants had distinct interpretations of “technological attack”. Some blamed the use and application of internet technologies within a neoliberal system, for others the technology itself is the problem because it is embedded in the capitalist logic and need to be completely rebuilt. Instead of dividing the groups, these and other differences in affinity and definitions seem to have contributed to a more comprehensive perception of circumstances and actors at play. That is, participants have recognized that in order to counter the range of issues involved they needed to defend the cause in a networked way. Furthermore, all interviewees confirmed that no one had talked to Google or municipal representatives. When invited by city representatives to discuss the conflict of interest between Google and neighborhood residents, initiatives responded in a unified manner: “There is nothing to negotiate and we will not be divided!” (Google Campus & Co. verhindern, 2018, July 30). Pageblank and Sergiou have explained that the refusal of round tables for conflict mediation came from a common understanding that the movement should avoid Google’s attempts to fragment the resistance. Therefore, the diversity of perspectives was aligned with the ideas of autonomy and self-determination (Anonymous, 2018, p.22; Google Campus & Co. verhindern, 2018, November 15), which were values shared by all those who expressed their involvement in this struggle.

Moreover, solidarity appears as a structural element for individuals that contested the Campus and Google’s idea of a fully data-driven and

monitored world, in which only the market coordinates the society (Google Campus & Co. verhindern, 2018, July 30). Old opposition to neoliberal politics and new challengers of the technological attack seem to have joined forces towards a common goal: the fight for a city of solidarity (idem, November 15). That is, these groups have developed their own utopias of a better world based on this idea. However, the activists did not restrict their perspective to the local context, i.e. Berlin. Rather, they highlighted the link between these localized issues and global processes, in which the Campus symbolized the technological attack that Google is promoting in Kreuzberg and worldwide (idem, March 3), and the policies of startup promotion in Berlin were understood as part of the global dynamic in which cities compete for investment. Such performance aligns with Castells’ idea that contemporary movements in the internet age constitute networks of individuals that are able to move together “regardless [differences in] personal views and organizational attachment” (2015, p.2).

2.0.4 | CONTRIBUTIONS

Throughout the mobilization process many demands and activists crossed this fight. It was observed that from initial points of intersection both the movement against the GC and other causes evolved and influenced each other. In addition, the amount of data exchanged in English put in evidence the presence of an international audience. On the one hand, it suggests a strategy from activists to reach followers of different nationalities, a means to build a transnational network of discussion and support around the campaigns. On the other hand, it also underlines the position of the members operating the online medias (Poell & Darmoni, 2012, p.28), as it is likely that such individuals acted as bridges in the protest, linking other actors to the cause through communication in languages other than German. Accordingly, online accounts record the exchange of messages of support between mobilizations from different countries and causes. Such pattern of communication confirm that a multiplicity of concerns permeated, fed and were fueled by the mobilization against the GC. Conforming to the content on Mastodon, in the international level it has connected to similar mobilizations in San Francisco, San Jose,

Toronto, Zurich, Rennes and other cities in France. At a local level, since late 2019 the account @FuckOffGoogle is also supporting the movement against the Amazon tower in Friedrichshain (Berlin), which led them to change their page's name to "Fuck off Google & Amazon" (n.d.).

Connecting countries, the relationship with the anti-eviction fight in San Francisco was the first to be established. Besides the tweets and toots shared, they expressed support for each other even at local demonstrations (Fig. 29 and Fig. 30). This movement inspired the dispute in Berlin in such a way that, for example, all the different campaigns have mentioned it in their printed material. The main reason is because Google

has an important role in it. San Francisco is considered the mother city of "WebTech" urbanism (NoGoogleCampus, 2018, p.18), where tech-companies from the Silicon Valley have been promoting a great spatial restructuring that have caused enormous increases in rents and property purchase prices with the result that the African American population and Hispanics in particular were driven out of the city (idem). Likewise, the campaigns in Berlin have also sent solidarity to protests in San José, a city located at the south of San Francisco, where Google plans to build a mega-campus that could bring up to 20,000 corporate employees into the community, which has already reached its limit as a dormitory town for Silicon Valley tech workers (idem).



Fig. 29 Solidarity from the anti-eviction movement in San Francisco to the movement in Kreuzberg
Source: <https://twitter.com/antievictionmap/status/1002453431775322112/photo/1>



Fig. 30 Solidarity from Kreuzberg to San Francisco, San Jose, Rennes and Toronto.
Source: wiki.fuckoffgoogle.de

In the case of Toronto, messages from @FuckOffGoogle (Fig. 31) sent solidarity to the mobilization that later was called #BlockSidewalk (n.d.). In October 2017, Sidewalk Labs - Alphabet Inc.'s urban innovation organization – announced its project to implement a smart-city experiment in the city's eastern waterfront (Sidewalk Toronto, n.d.) and local residents gathered to protest against it. As for San Francisco, all campaigns in Kreuzberg demonstrated concern with the undertaking in the Canadian city. Similar to Berlin's case, after facing continuous resistance, the project has been canceled in May 2020. Some months before this reversal, Pageblank commented the conversation between movements and expressed their belief that preventing the project in Toronto could mean a significant barrier to Alphabet and Google's plans of technological domination. Given these examples, the observation of cross-contributions provided for observing how "cities come to perform the role of incubators of wider struggles", being able to connect movements across geographies (Uitermark et al., 2012, p.2547).



Fig. 31 Message of solidarity to the movement against the Sidewalk Labs project in Toronto. Source: @FuckOffGoogle on Mastodon.social.

Furthermore, the pre-existence of insurgent collectives in Kreuzberg and surrounding areas was crucial to the uprising against the Campus. This is a feature that can be observed in the formation of campaigns, for instance. Also, Konstantin Sergiou has emphasized it by saying that Berlin counted on a dense network of individuals fighting against social injustices. Though this structure was already set when the movement arose, such network continued to develop along this fight. During meetings and demonstrations individuals have exchanged experiences and built collective understanding about the tech-industry and its effects in their lives and spaces. Knowledge produced in this process is now expressed and further developed in new struggles. An example that evidences such continuous and networked production of knowledge is verified in the ongoing movement against Amazon (BerlinvsAmazon, n.d.; Fuck off Amazon, n.d.). Those meetings that once had extended as "post-Anti-Google café" in the Kalabalik Library turned out to be called "anti-Amazon café" since November 2019 (Fig. 32), which means that locals redirected the debate developed during the battle anti-Google to the emergent struggle in Friedrichshain.



Fig. 32 Sticker found in Kreuzberg: Invitation to Anti-amazon café Face2Face at Kalabalik. Source: own picture.

3 | URBAN SPACE

City spaces bring together various elements and processes in articulation, such as the natural environment, infrastructure, buildings and machinery as well as population, its cultures, practices, history, institutions and relations with other territories. Thus, beyond the spatial forms, urban space also comprise the social interactions that shape and are shaped by the places where they occur. Considering that “society is structured around conflicting positions which define alternative values and interests”, thus the production of urban space is marked by conflicts of interest over its uses and forms (Castells, 1983, p.xvi). Moreover, it is assumed that the spaces of contemporary cities are embedded in the logic of neoliberal capitalism, where the economically dominant classes act in partnership with the state to assure the application of their values and interests in the practices and places of daily life. Therefore, in order to understand the dispute in Kreuzberg and how it relates to the current dynamics of space production, this chapter is first dedicated to clarify what is understood as urban space and on what theories it is based. It then discusses some historical and demographic aspects that distinguish the urban setting of Berlin and its referred district. Last, it briefly examines how the local government addresses the topics of internet and technology companies in its current urban development plans.

1.1 | THE PRODUCTION OF URBAN SPACE

One way to start defining space is by connecting it to the social relations that happen in and through it. The debates of Lefèbvre (1991) and Castells (1977) converge in this sense. Both authors have conceptualized



Source: own picture.

space by its association with social interactions, from a Marxist perspective. For Castells space is fundamentally a social product (1977, p.430), it is “a material product, in relation with other material elements - among others, men, who themselves enter into particular social relations, which give to space (and to the other elements of the combination) a form, a function, a social signification.” (p. 115). In other words, the relationship between society and space is reciprocal, space is produced by society while it also transforms the society living in it. Yet the ways in which each individual participates in this relation vary according to how society is structured. Considering that the qualification of space as “urban” is based on a specific articulation of economic, political and ideological systems in a spatial unit we call city (idem, p.127), hence the very notion of urban space derives from the capitalist regime and the way society is organized in it. Thus, the spatial production of cities relies on two major conditions: the specific organization of society that assure the reproduction of capitalism and the sociopolitical conflicts that emerge from it (Castells, 1977, p.431). From this perspective, urban spaces are the outcome of contradictory projects, those that are promoted by dominant interests whose main objective is ensuring economic profit in space and projects that counter the sociospatial injustices generated by those prevailing values. A similar view is shared by Uitermark et al. (2012), which derives the production of contemporary cities from relations between those who control (dominant groups) and those who contend (struggling groups).

In the case of Lefèbvre (1991), space is both the basis of social relations (p.404) and the product of how these relations are organized (p.412). This way, considering the particularities of his historic context, he points that the structure of society under capitalism has been shaping space as urban, where exchange value (profit) prevails over use value (idem, p.410). Then, the production of urban space, or urbanization, highlights a specific idea of space as things, commodities. According to Lefèbvre, this operation became possible because the notion of space in capitalist society is split in two: there is the space of social practice – the one of everyday life – and the abstract space, which is mental (p.407). Consequently, urbanization is first conceived in abstract space (e.g. through planning, statistics and demographics) and then implemented primary based on its

economic value, without necessarily considering what is produced in the space of social practice, which leads to the emergence of urban struggles.

Furthermore, the notion of a space split in two helps understanding the existence of sociospatial inequalities in the capitalist city. When we examine how abstract space is separated and imposed on everyday practices, we see that dominant groups and institutions (public and private) concentrate the means to produce abstract space while other groups in society are only given access to space in the sphere of social practices. This implies that those gathering the means to produce the abstract space have the power to build urban spaces according to their view, imposing it to the places and practices of society. Therefore, sociospatial inequalities are linked to an uneven distribution of the conditions for producing space. Such asymmetry can be observed, for example, in the way the representation of space (e.g. maps), used in quantitative analyses and planning, growth and control strategies, shapes the everyday life of urban residents.

Complementary, Harvey (1989) defines urbanization as “a spatially grounded social process in which a wide range of different actors with quite different objectives and agendas interact through a particular interlocking spatial practices”, the logic of capitalism being what defines the interlacing of such practices (p.5). Under this circumstance, the production of city spaces relies on specific “institutional arrangements, legal forms, political and administrative systems [and] hierarchies of power” that “dominate” and constrain “the courses of action” of everyday life (p.6). Then, by affecting the experiences of urban inhabitants, it creates tensions in space – e.g. uprisings - that leads to further change in the urbanization process (idem). Harvey’s work (1989) is important here because it identified an important reorientation in the urbanization process over the 1970s and 1980s, which occurred in line with global political-economic restructuring. Although such transformation was only at an early stage when the author recognized it, what he then defined as “urban entrepreneurialism” became the dominant model of urban development under neoliberalism.

Therefore, what we currently find in most cities is that entrepreneurial urban policies lead the production of space. This approach is framed by a context of inter-urban competition (Harvey, 1989), in which cities seek at attracting “external sources of funding” (p.7) in order to reach economic growth. These urban policies are centered on the idea of place-making, that is, they focus on upgrading a place’s image. This is achieved, for example, through interventions in physical space or by exploring a “marketable ingredient” of the site, such as culture or heritage (idem, p.9). In addition, the design and implementation of these projects takes place through public-private partnerships (PPPs), which - given their economic objectives - are highly speculative and thus the most common is that the “public sector assumes the risk and the private sector takes the benefit” (idem). As Harvey (1989) observed, the rise of such profit-based pattern of urbanization have contributed to a “general increase in problems of impoverishment and disempowerment” (p.12). Likewise, a recurrent effect of entrepreneurial policies is gentrification, which drives the displacement of disadvantaged residents and strengthens spatial tensions.

Adding to neoliberal policies, today the production of urban space is influenced by the process of increasing digitalization. The development of information technologies has inserted a new layer in the city, the digital space, which implies that now cities are also “their digital information presences, and are reproduced as such” (Shaw & Graham, 2017, p.910). This is because when talking about the digital sphere we recall the notion of abstract space, where technology, information circuits and specialized knowledge are key means to create “representations of space (maps and plans, transport and communications systems, information conveyed by images and signs)” (Lefèbvre, 1991, p.233). Consequently, urbanization is “intimately shaped by technologies of representation” (Barns, 2020, p.54). Put another way, “the ubiquity of digital information and communication technologies (ICTs) that produce and distribute abstract space is now central to the reproduction of urban space” (Shaw & Graham, 2017, p.908). Accordingly, digitalization brings new actors to urbanization, with the tech-industry being the most prominent among them. Also, it interferes in the way the different groups in society interacts in and through urban space, which then entails new relations of content and control (Uitermark et al., 2012).

1.2 | URBAN CONTEXT: BERLIN

Major economic and political conflicts of the twentieth century have affected Berlin in quite distinctive ways. Considering only the post-war period, the damaged city went through a period of intense reconstruction, its territory was divided, walled up and governed by antagonistic regimes for decades until it was reunified in the 1990s, when the city regained the status of German capital. This means that for much of that century, the city was at the front line of far-reaching wars, which conditioned its urban development (Hain, 1997, p.54). The unstable scenario also entailed several migratory flows, both inward and outward, e.g. the arrival of guest workers in the 1960s (FHXB Museum, n.d.) and the mass displacement of eastern residents in the 1990s (Bernt et al, 2013, p.15). Thus, despite the renewal projects the capital undertook in the last decades, the socio-spatial legacy of those events is still visible to this day, be it in the architectural landscape, in the differentiation of local commerce or in social practices (Mayer, 2006b, p.96).

The reunification triggered a period of intense administrative and spatial restructuring in the city. It was permeated by lively debates about revitalization projects (Hain, 1997, p.54), high unemployment rates, privatizations, economic crises and social conflicts, as well as a vast displacement of residents and a sudden deindustrialization (Bernt et al, 2013, p.14). Hence, the neoliberal logic of interurban competition has reached Berlin at a particularly turbulent time. Along the course to reconnect the two sides of the city, the race for alluring external investment caused much controversy and initial strategies involving real-state speculation failed, such as the intensive construction of new office spaces and the subsidies to promote individual home ownership in the city center (Hain, 1997, p.59). Based on a comprehension that the impoverishment occurring in the city was primarily a “consequence of the exodus of high-income inhabitants” and not an effect of deindustrialization and unemployment (Mayer, 2006b, p.103), those misguided speculations – promoted by the government and local elites - have resulted in austerity policies and the intensification of urban inequalities since the 2000s.

Still, several entrepreneurial strategies for urban governance (Harvey, 1989, p.8) have been tried out in Berlin and some do seem to have succeeded, at least in terms of generating economic growth. For instance, the city has found its place within the international division of labor through the support and promotion of “knowledge-intensive’ and innovation driven activities” (Krätke, 2004), notably in the creative and information technology industries (Senate Department for Economics, Technology and Research, 2016, p.6). In this sense, some early visions of Berlin as “a center for innovation in an era of communication technology” (Hain, 1997, p.55) turned into reality. Today, the city is “one of the most important locations for the digital economy in Europe and globally” (Senate Department, 2016, p.5), figuring as the core of artificial intelligence (AI) startups in Germany (Fig. 33) and the second startup hub in Europe. In addition, urban marketing experts have enhanced Berlin’s image by exploring its socio-cultural features (Krätke, 2004, p.139), either by investing in projects that profit from its “turbulent history” or by exploring the alternative lifestyles of its neighborhoods (Novy, 2013, p.225). Particularly, such an image of “creative”, “hip” and “exciting” has contributed to distinguish the German capital as the third tourist destination in Europe (idem, p.224). Likewise, by analyzing the

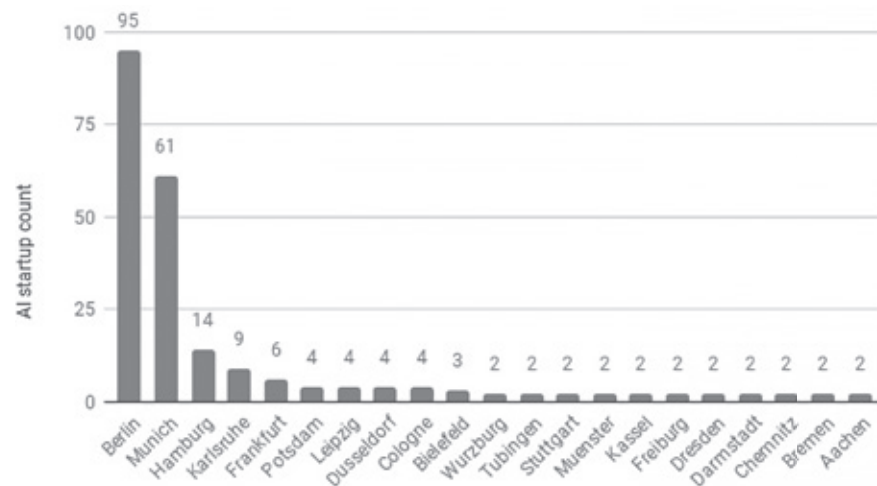


Fig. 33 AI Startups in Germany.

Source: www.appliedai.de/hub/2020-ai-german-startup-landscape.

“be Berlin (sei Berlin)” campaign, Colomb & Kalandidas (2010) point a new trend of place marketing emerged in 2008, where the city became celebrated by the “vibrant” diversity of its inhabitants (p.16). That is, by exploiting the hitherto marginalized social differences. Therefore, we find that in the course of building a profitable identity for the city, besides the physical transformations, the meanings attributed to its urban spaces were also tailored in order “to attract tourists, investors, students, and ‘young creatives’” (idem).

Urban restructuring and neoliberal policies have implied in “more pronounced spatial inequalities” (Mayer, 2006b, p.95). Beyond the remaining disparities from the past division (East/West), Berlin also developed center-periphery polarization over time (idem). For instance, families have been moving to the outer periphery (Berlin HYP & CBRE, 2020, p.22) while the city concentrates households with less than two people (Amt für Statistik Berlin-Brandenburg, 2018, p.14). Also, Berlin counts on particular contradictions within the S-Bahn ring because some western districts that once bordered the wall are today centrally located (Fig. 36 to Fig. 39). Thus, some previously peripheral areas that have historically concentrated low-income and stigmatized groups, like Kreuzberg and Neukölln, are now in contrast with the “islands of wealth” developed in the city center (idem, p.100). Moreover, urban upgrading provided for the emergence of varied forms of gentrification in Berlin. According to Holm (2013), the variations in urban regulation and housing subsidies over the years have led to diverse forms of real estate valuation, which in turn resulted in different dynamics of displacement. The author identified three kinds of gentrification occurring in the city. The first one is observed in Mitte and Prenzlauer Berg where luxury housing projects were built, attracting wealthy residents. The other two forms relate more to processes of rental increases, concentration of young creatives and the displacement of existing lifestyles.

As the city’s housing market is primarily based on rent (about 83%), housing struggles have played a key role in the history of the city’s urban development. After a period of strong rental regulations and housing subsidies established in West Berlin during the 1980s - result of persistent

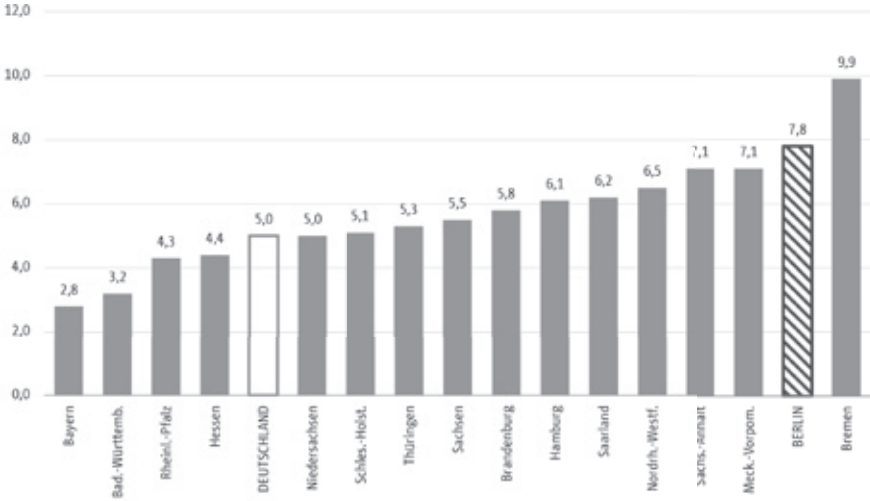


Fig. 34 Unemployment in Germany (%), 2019.
Source: Senate Department for Economics, Energy and Industry (Berlin).

mobilizations (Holm, 2013, p.177) - as well as the public investment in social housing in the early 1990s, since the 2000s the local government has reduced investments in this field and privatized much of its public housing stock (Uffer, 2013, p.155). Combined with other austerity policies, the shift in the strategy of housing provision in Berlin has increasingly favored the environment for real-estate investors at the cost of depreciating the welfare of its tenants (idem, p.169). As a result, today rental prices in Berlin are the fastest growing in Germany (ImmobilienScout24, 2018) while it still has the second highest unemployment rate in the country (Fig. 34). Additionally, the proportion of monthly income spent on rent is increasing every year (Fig. 35). Thus, while real estate capital is currently making a fortune in the city, many groups in society are in crisis due to a lack of affordable housing alternatives (TOP B3rlin, 2018, p.15). On the part of local government, the most recent response to such a crisis was to set a limit on the value of rentals, the “Mietendeckel” (Senate Department for Urban Development and Housing, 2020), which did not come as a proactive propose but rather is an outcome of continuous grassroots pressure.

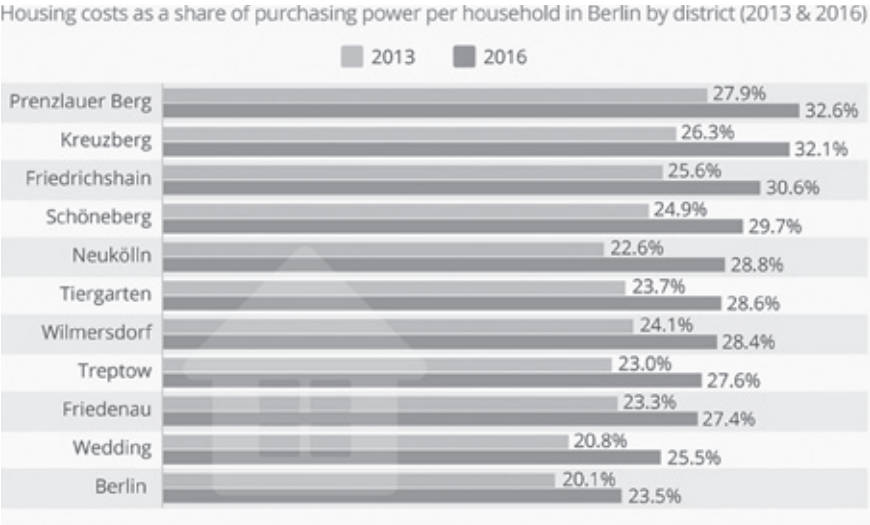


Fig. 35 Housing cost's share of purchasing power in Berlin.
Source: www.statista.com.

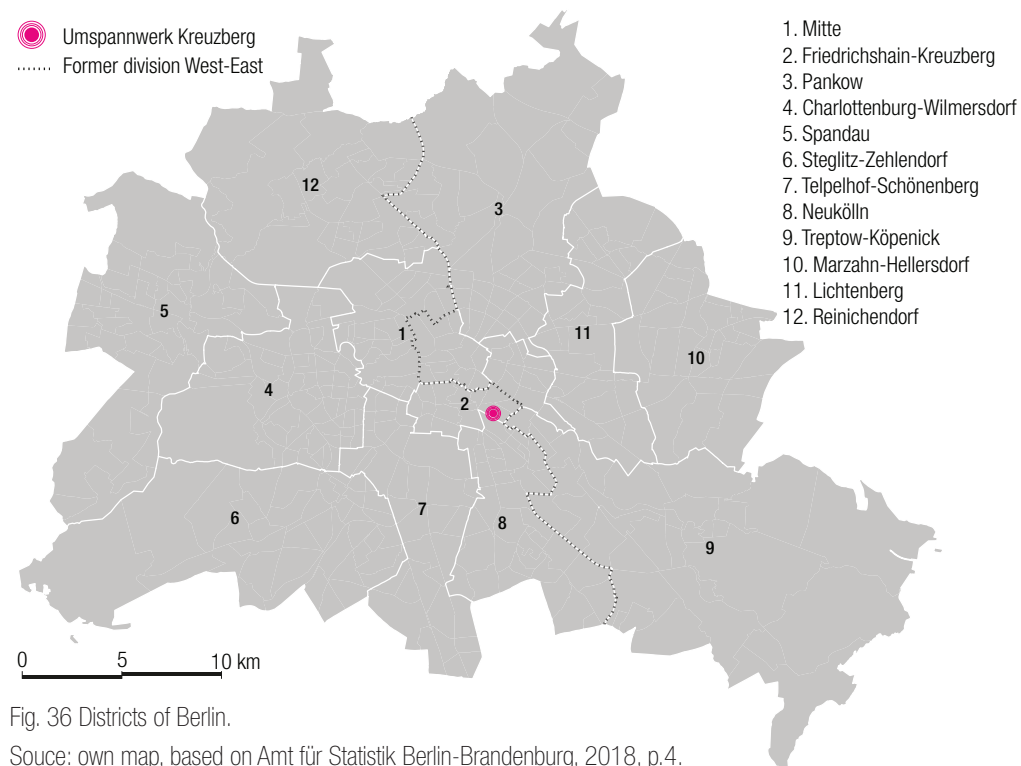


Fig. 36 Districts of Berlin.

Source: own map, based on Amt für Statistik Berlin-Brandenburg, 2018, p.4.

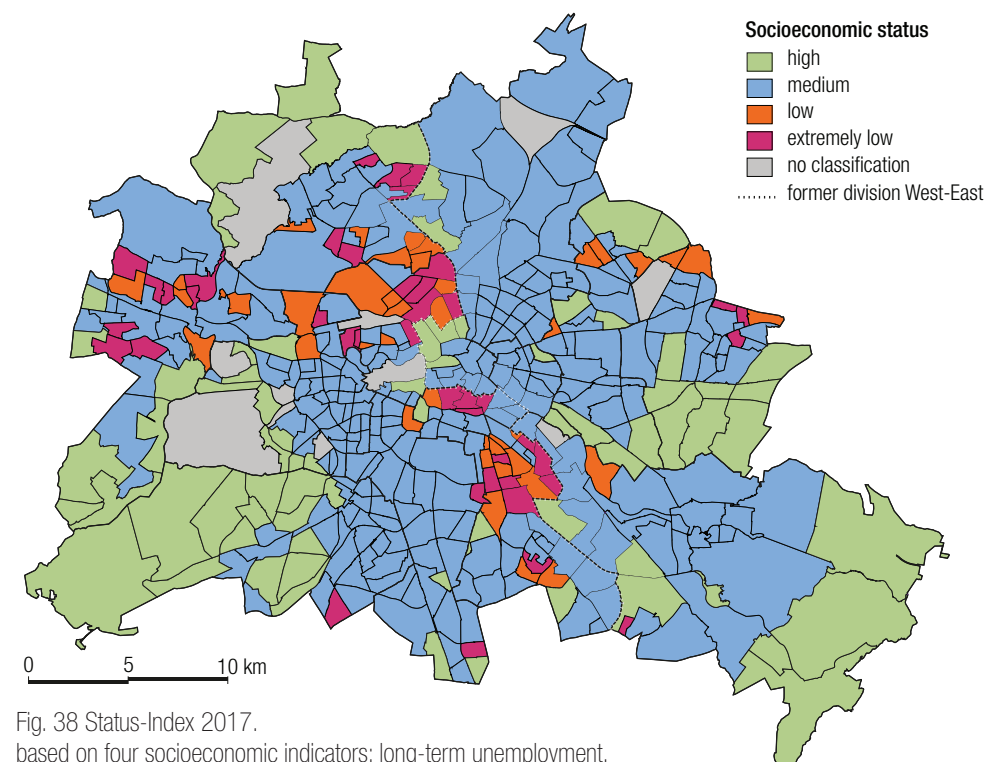


Fig. 38 Status-Index 2017.

based on four socioeconomic indicators: long-term unemployment, subsistence aid recipients, unemployment and child poverty.
Source: Geoportal Berlin / Status-Index 2017

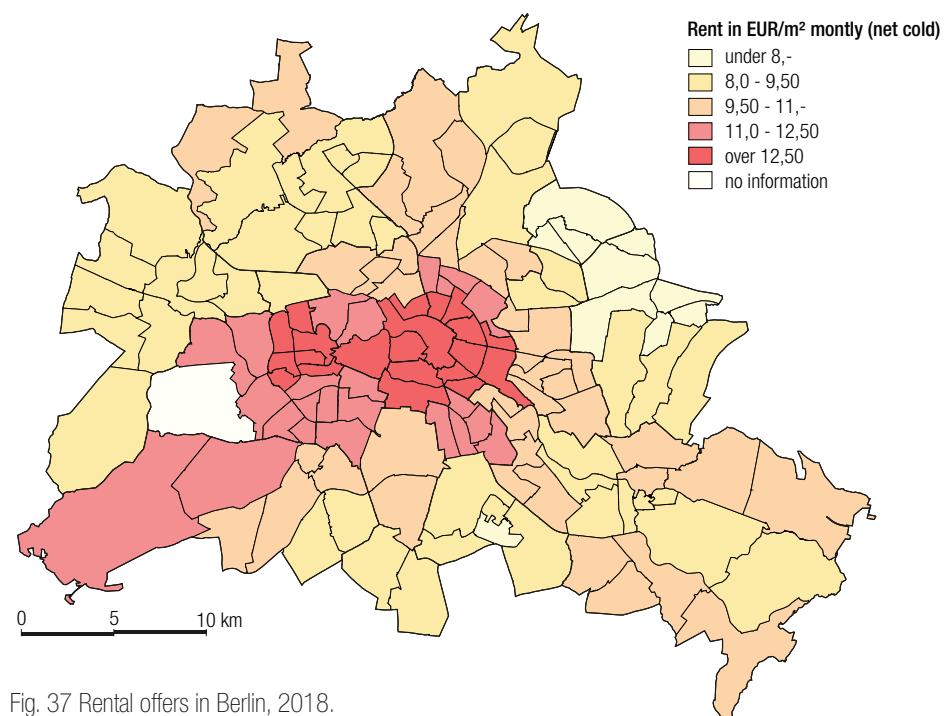


Fig. 37 Rental offers in Berlin, 2018.

Source: Geoportal Berlin / WOHNATLAS - Angebotsmieten 2018

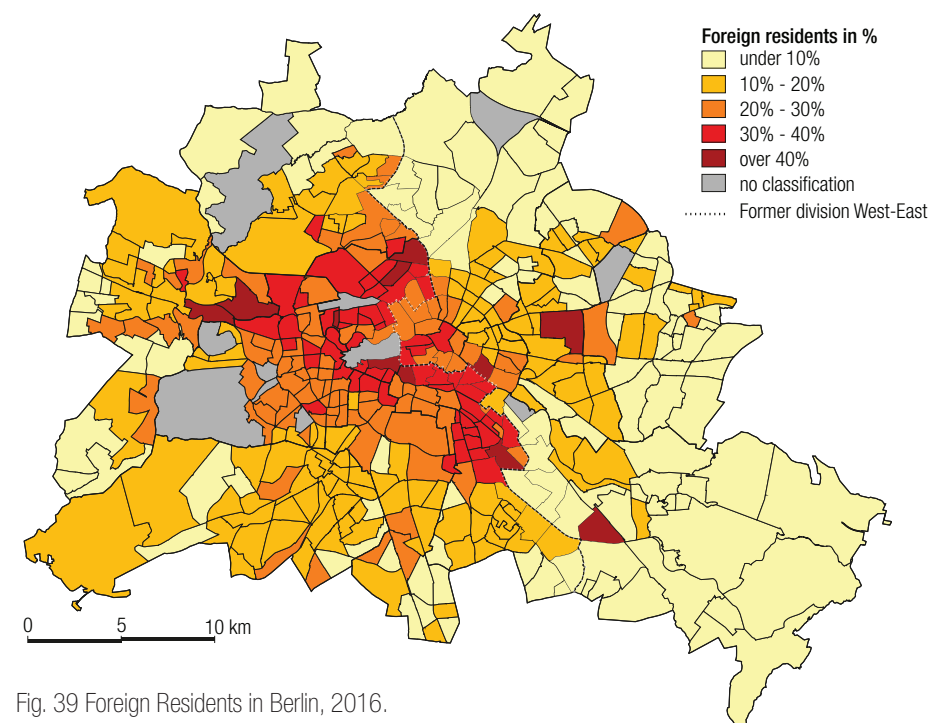


Fig. 39 Foreign Residents in Berlin, 2016.

Source: Geoportal Berlin / Ausländerinnen und Ausländer 2016

3.0.1 | KREUZBERG

In terms of politico-administrative structure, Kreuzberg is subdivided in three parts: north, south (Kreuzberg 61) and east (SO36). These parts are jointly managed with the neighboring region of Friedrichshain, forming the district (Bezirk) Friedrichshain-Kreuzberg (Fig. 40). The three referred sub-regions keep their distinctions from each other, both in terms of socioeconomic indicators, land use and occupation, and in the way they were affected by the urban transformations in Berlin. “Kreuzberg 61, located south of the Landwehrkanal, is considered the tame, middle-class part” where “old buildings have been renovated and maintained, and rents are correspondingly high” (Berlin, n.d.). On the other hand, the northern area contains more recent and contrasting constructions ranging from museums and tourist sites to social housing blocks (idem), being the part with the highest concentration of population in extremely low socioeconomic conditions (Fig. 38). In the eastern part, SO 36 or Kreuzberg 36 is composed of a majority of “simple old buildings” (Berlin, n.d.) that have mixed uses (residential and commercial). In addition, this is the area where most startups are settling and where the contend against the Google Campus emerged. Besides formal administrative divisions, Kreuzberg also comprises several Kiez (idem), which are typical territorial units in Berlin where locals share a sense of community.

Since Berlin’s historical context has implicated in housing struggles, migration flows and urban remodeling processes, central districts have been critically affected. This is the case of Kreuzberg. The northern part of the district had its buildings badly damaged in the WWII and was the object of an intense phase of reconstruction in the following decades (Berlin, n.d.). Turkish and other guest workers arrived in the 1960s and started settling in there at the same time the Berlin wall was under construction. The barrier between east and west has notably transformed the area around Kotbusser Tor (SO36) as it has partially closed the region (Berlin, n.d.). As a consequence, during decades it was one of the most affordable areas in the western city (Güney & Kabaş, 2017, p.5). Under such circumstances, together with the Turkish community, Kreuzberg



Fig. 40 Kreuzberg: subdivisions and startups.

Sources: cartographic basis from openstreetmap.org (2020), district subdivisions from Berlin, n.d. startups data retrieved from businesslocationcenter.de / Berlin Economic Atlas

welcomed many alternative groups, such as left-wing intellectuals, artists (idem), “anarchists” and “punks” (Drissel, 2011, p. 20), turning into the home of a “politically active urban counterculture”, a trend observed in districts of several cities in West Germany at that time (Mayer, 1993, p. 150).

While the reunification returned to the neighborhood its centrality in the city, it also triggered a process of urban development that has leading to a continuous appreciation of the region. This is due less to its proximity with luxurious renewal projects in Mitte than to image-enhancing, which has particularly counted on the exploitation of alternative lifestyles previously established. That is, the once stigmatized population living in Kreuzberg, as well as their living spaces, have been advertised as a symbol of the city’s diversity (visitBerlin, n.d.). Such an image shift has attracted not only “international creative pioneers” (Holm, 2013, p.171) but also expensive shops, co-working spaces and many startups. Therefore, we

find that the strategy of development applied in Kreuzberg is based on promoting the “aspects of the material and symbolic landscape” that have the “authenticity necessary for attracting tourists, investors, or upwardly mobile groups such as tech workers for startups” (Mayer, 2015, p.12).

Still, place making and gentrification have a particular dynamic in this case because the urban policies applied in the district during the 1980s provided for the maintenance of its social mix during the years after unification. As an “outcome of militant protests” against the preceding reconstruction plans, the area counted on rent caps and funds for “careful urban renewal” in the 1980s, which was aimed at preserving the social composition and spatial structures of this district as well as encourage civic participation (Holm, 2013, p.177). Thus, during the decades in which the program was valid, the increase in rent for long-term contracts was restricted, contributing to low-income residents being able to stay in the neighborhood even after real estate appreciation (idem, p.178). However, as Holm (2013) observed, since such regulations expired “the prices for new rental contracts have risen considerably” (p.178), which means that displacement has been occurring mainly through the termination of long standing rental contracts, for both residential and commercial units.

Furthermore, local collectives have argued that gentrification in Kreuzberg was entering its next phase, in which only large companies and higher earners would be able to afford the rent (TOP B3rlin, 2018, p.8). Actually, what can be observed in official reports is that the region have attracted startups clusters in the last years, e.g. the one currently located in the substation were Google planned to install its campus. Such campuses or hubs are characterized by one building with several small and fast growing companies that work particularly with media or digital innovation and count on public and private funding for developing its activities. In total, the district of Friedrichshain-Kreuzberg has to this day 790 startups (Startup-map, n.d.). Given that digital industry is growing fast in Berlin (Senate Department for Economics, Technology and Research, 2016, p.3), the settlement of these clusters in Kreuzberg has opened new opportunities for high and rapid returns in real-estate investments. Although locals are also concerned about two other recent

developments, Factory and FullNode (Google Campus & Co. verhindern, 2018, March 15), the process of real estate speculation in Umspannwerk itself is an example of the current dynamics of property valuation in the neighborhood. The real estate investor who managed the substation between 2015 and 2020 reported the profit obtained with the valuation of the property as follows: “we have exceeded our business plan targets and delighted with the value growth and returns we have delivered to our client” (Avignon Capital, 2020, February 25). Put another way, despite Google’s retreat, the installation of other startups in and surrounding the building was enough to increase both the price of the property and the rental of its office space.

The increase in rents and the reconfiguration of the district to be a home and workplace for the creative (especially in the media and technology sectors) have been driving a lot of residents out of the district and many other households are at risk of being displaced in the region (redfish, 2018). As a result of conflicts and continuous restructuring, people currently living in Kreuzberg are made up of dwellers who have managed to remain in the neighborhood through struggle and a floating population composed by many internationals, part of them employees of creative industries. In this scenario, social conflicts do not go unnoticed and this is because the neighborhood has a long history of resistance dating back to the 1960s, so there are still several collectives and squats resisting the commodification of space in Kreuzberg. The fight for housing and public facilities were at the core of conflicts occurred in the neighborhood during the 1970s, which led to social accomplishments in the next decade (FHXB Museum, 2019). Yet since reunification, the same population that once have found in this place an affordable option, struggles to keep living in their community (Färber, 2014, p.258), which has provided for the emergence of new mobilizations.

Symbols of social resistance are present in many places within the district, mainly in the Kreuzberg 36. The inhabitants of this area have a reputation for being “rebellious” (Google Campus & Co verhindern, 2018, November 15) and this is due in part, but not solely, to their heated participation in the May 1st events, of which May 1987 was the

most notable (Berlin, n.d). The combative stance towards the dominant structures is visible in the signs and messages written in buildings facades, in the street art, in a multitude of posters stuck to the district's poles and walls, as well as through frequent tenants' demonstrations. As Mayer (2015) observed, recent mobilizations in Kreuzberg have been able to bridge distances between heterogeneous discontent groups, both from inside and outside the district, such as the protests against racism and raising rents that occurred in 2012 around Kotbusser Tor, which originated from the tenants association Kotti & Co. (p.8). Other example that elucidate the grassroots' perspective in the region is found in the brochure "Keine guten Nachbarn" (NoGoogleCampus, 2018). There, locals affirm that they do not reject change on principle, but if the discourse of progress endangers one's home and social environment, then it is vital to stand up against it in order to maintain the freedom of alternatives (p.22). Thus, in combination, these forms of expressing dissent informs that those concerned act in a network of cooperation, which has contributed to shape urban space from below.

3.0.2 | STARTUPS AND THE SMART CITY PLAN

In recent years Berlin's administration has been actively engaged in promoting digitalization as a means to ensure the city's national and international competitiveness. Therefrom, the Senate Department for Urban Development and the Environment published the "Smart City strategy Berlin" (2015) where it defined the guidelines to implement it. The idea of transforming Berlin in a Smart City is connected to the objective of developing a "viable" city for the future, one that uses resources more efficiently while promoting economic growth and quality of life for its citizens (p.5). The strategy then builds up on processes of digitalization, which implies in the use of new information and communication technologies to execute in real-time "capturing of the active and passive features of analogue processes of everyday life by means of suitable sensors and their transfer into digital information which can be further processed by electronic means" (p.7). The document also explains that such technology already "pervades almost all areas of urban life", playing "a prominent role in public administration", a feature that should be

"continued and intensified" in the city in the coming years (idem).

Conforming to the Senate (2015), application of such strategy greatly depended on building a network of public and private partners, "to develop the city and its infrastructure within a cooperative matrix" (p.25). It should then rely on cross-disciplinary efforts, gathering research, funds and experts from diverse areas. From this, the smart city plan being implemented in Berlin covers six connected topics:

- Administration - consists of simplifying and digitalizing the institutional operations. Thus, it aimed to improve communication between the various departments of the city, while making it possible to access public services and conduct bureaucratic procedures online. It should also encourage civic participation and provide residents with training in IT skills.

- Housing – smart in this case means ensuring diversity and social mix in neighborhoods; providing new and existing housing stock with sensors that better control the use and supply of electricity, water and heating; development of online incentives to integrate residents into neighborhood daily life, e.g. "Kiez-App" (p.21).

- Economy - this part focuses on promoting the digital economy in Berlin in order to prepare the city to lead the market for innovative applications, thereby fostering competitiveness and economic growth. It envisaged a set of incentives, projects and grants to research institutes and startups in order to attract and boost the development of smart and innovative technologies.

- Mobility - aimed at further improving the digital coordination of traffic, logistics and public transport systems. It should then consider existing infrastructure and implement new technologies that would improve the connectivity of transport networks, the target being to promote the city as an example in this field.

- Infrastructure - comprise the sensors and devices needed to digitalize and integrate all urban service systems, such as gas supply, heating, energy, water, waste disposal and recycling.

- Public safety – besides the operations of traffic control, this part was targeted at crime prevention and safety measures against natural disasters.

By the time when these guidelines were released the city had already taken measures to become a startup center in Europe. Accordingly, these strategies brought together, under the theme “Economy”, all the initiatives that McKinsey’s consultancy prescribed in 2013 (Senate Department, 2015), where it pointed out how to leverage the city’s economic growth through investment in startups. McKinsey’s suggestions at that time highlighted the need to invest in research, to create a “one-stop”, multilingual agency that would cut the path for foreign startups install in the city, to build a network of entrepreneurs in this sector and to establish a startup campus in the city (Haenecke et al., 2014, July 1). Therefore, despite the goal of improving citizen’s quality of life, the strengthening of digital economy seems to be the main driver for the deployment of smart technologies in Berlin.

As the current scenario demonstrates, much of the digitalization strategies has already been implemented, mainly the guidelines regarding startups. Berlin has today a set of applications and websites that provide content in English to help young founders, foreign entrepreneurs and investors to find their way to develop their projects in the city (Business location center, n.d.). In the mobility sector, there is an integrated app for smartphones where users can access all modals of the city’s network of transport, which includes services of car, bike and scooter sharing in connection with the existing infrastructure of public transportation (Jelbi, n.d.).

Moreover, the city has nurtured a startup ecosystem and has its own website for monitoring it (Startup-map, n.d.). Aligned to it, two startup hubs were established in the German capital, one in the financial/banking sector (Fintech), which is located in Charlottenburg, and the other focusing in the Internet of Things (IoT), located nearby the Görlitzer Park (Federal Ministry for Economic Affairs and Energy, n.d.). The IoT hub, called “Factory”, has a particular connection with the case study (NoGoogleCampus, 2018, p.12). This is because the building is located right on the border of Kreuzberg 36 and Alt-Treptow, bringing together many startups as well as the CODE University, which is dedicated to training in digital technologies (Factory Berlin, n.d.). Beyond the location

itself and the implications to gentrification – as previously mentioned – the Factory is a Google’s partner since 2012 (Grove, 2016, November 23; Factory Berlin, n.d.), which means that despite the retreat of the Campus in the Umspannwerk, Google kept its channel to promote activities in the neighborhood.

4 | INTERNET

The way people communicate with each other has varied according to the development of information and communication technologies (ICT). As Kellerman (2019) noticed, just a few decades ago the means of communication were restricted to place-to-place connections (p.6), such as telephone calls, letters or face to face meetings. However, since the emergence of the Internet, i.e. a technology for connection via worldwide computer networks, the possibilities for information transfer “among both people and things” (idem, p.3) are increasing and evolving on an unprecedented scale. Accordingly, communication tools have become progressively more mobile and integrated. As a result, a whole new industry of tech companies has emerged to implement and support the infrastructures for digital connectivity - both in terms of hardware and software. Furthermore, it is argued throughout this chapter that the deployment of Internet technologies has led to a “very specific reorganization of space”, economy and society (Couldry & Mejias, 2019, p.45). Thus, I first examine recent theories on this topic, giving a brief overview of current uses of the Internet in the city, and then discussing how Google participates in the observed phenomena.

1.1 | CONNECTION AND SURVEILLANCE

Technologies of digital communication, such as the internet, are based on data transfer from one electronic device to another. In this process information is codified and “transmitted through routers and servers to and from human, device and system subscribers” (Kellerman, 2019, p.26). This way, data can be defined as “the by-product of social interactions that



are mediated by digital technologies” (Couldry and Mejias, 2019, p.89). Therefore, much of the recent discussion about the internet deployment is centered in how data is retrieved, stored and handled. A frequent concern refers to the fact that those managing the means of connection those managing the means of connection are on an asymmetrical position to decide how data is used when compared to the individuals who generate this data when connected to the internet. Additionally, there is a debate about privacy and security regarding it. That is, the need to ensure that the information transferred via internet cannot be accessed, used or exposed by others without consent. Moreover, major criticism relates to the process in which large amounts of data generated in the digital sphere (Big Data) are used for profit, surveillance and exploitation (Zuboff, 2019; Couldry & Mejias 2019).

Zuboff (2019) has identified that since the early 2000s a significant part of the large amount of data generated online, which were hitherto disposable, started to be processed and analyzed by Google and its partner companies as a means to predict future consumption behavior. Hence, it prompted a new business model that is based on the trade of predictive analyses for personalized advertisement, which in turn derive from the collection and processing of free raw data produced during routine online activities (p.7). According to the author, since the discovery of this “behavioral surplus” most advances in Internet technologies have been driven by the economic imperatives that push the growing and continuous extraction of online data in order to render predictive analysis (p.128). Moreover, this economic imperative is intensified in the extent that more and more companies enter in the behavioral market, increasing competition for ever more fast and accurate predictions (idem). In this scenario, any uncertainty figures as a friction that must be eliminated in the name of guaranteed outcomes. Therefore, the more the Internet becomes ubiquitous and integrated into everyday life, the more complete and precise is the anticipation of what individuals “will do now, soon, and later” (p.8), thus generating more revenues for corporations involved.

Following this perspective, such profit-oriented use of data gave rise to a new economic logic that is based on mass-surveillance of

online activities. Zuboff (2019) has called it “Surveillance Capitalism”, pointing out that it is rooted in neoliberalism but has extended beyond it. As this logic depends on computer-mediated interactions, it counts on a particular set of ideologies and methods of legitimization. The main relevant mechanisms for Zuboff’s research are:

- Dispossession cycle: continued extraction of behavioral surplus (from internet use) requires many coordinated operations that are divided in four cyclical stages (p.136). First there is a phase of “unilateral incursion”, when tech companies explore means of data mining from different digital activities (e.g. use of laptops, smartphones, emails and websites). Then, as such incursion begins to face the resistance of society, these companies move on to the next phase, “habituation”, which consists of turning “contested practices” into ordinary operations at a high speed (p.139). Depending on the level of opposition, habituation is then combined with “adaptation”, which involves strategically and punctually satisfying the demands for regulating data extraction. In the last stage comes “redirection”, when those contested practices are re-branded and presented through “new rhetoric, methods and design elements” that make “they appear to be compliant with social and legal demands” while in reality they continue to push dispossession of behavioral data forward (idem).

- The “Uncontract”: the right to collect, use and profit from users’ data are self-declared by technology companies, unilaterally. In other words, these companies have gradually asserted that all types of behavioral data are “free” for their taking (p.218). Such a declaration of dispossession takes the form of contracts, terms or agreements, which we must accept as a requirement to use online services. Thus, by leaving few, if any, possibilities of withdrawal, these “new contractual forms” compel us to legitimize their rights to use and manipulate our data, and by extension our behavior (idem). Through this mechanism, individuals are coerced to continuously submit their experiences to data commodification.

- Inevitabilism: as in the case of uncontract, surveillance capitalism depends on escaping regulation and eliminating any form of friction to continuous data extraction. Arguably, it nurtures the discourse of the inevitability of technological progress, as if it were the only way to achieve the common good of society (p.220). The ideology that the Internet will

inevitably be more and more ubiquitous, so that everyone and “everything will be connected, knowable and actionable in the near future” is then taken for granted, with little room for critical debate (idem). Above all, such narrative works as a mechanism for distracting the discussion about the economic imperatives that drive this regime.

- Means of behavioral modification: such concentration of power and knowledge, aligned with technological advancements, has provided for a unique type of exploitation, which consists of tuning, herding and conditioning one’s behavior in order to maximize the certainty of one’s future actions (p.293). Hence, the more individual experiences are computer-mediated, i.e. the more surveilled they become, the better the conditions for modifying behavior, thus guaranteeing future outcomes.

Similarly, by addressing the consequences of data accumulation from internet connectivity, Couldry and Mejias (2019), as well as Thatcher et al. (2016) have called the emergent phenomena as “data colonialism”. Despite having many arguments in common with Zuboff (2019), Couldry and Mejias (2019) point out that surveillance is certainly part of this new logic but is not enough to distinguish it from other forms of capitalism. According to their perspective, data colonialism is defined as:

the extension of a global process of extraction that started under colonialism and continued through industrial capitalism, culminating in today’s new form: instead of natural resources and labor, what is now being appropriated is human life through its conversion into data (p.xix).

Since today individuals are progressively using “internet technology to move through, experience and come to know the world on a daily basis”, data colonialism also appears as the process in which an extensive commodification of everyday life has become possible (Thatcher et al., 2016, p.6). It would then be a stage of transition from neoliberalism to another form of capitalism, where “there will be nothing left of human life except materials for potential commodification” (Couldry & Mejias, 2019, p.33). As part of an evolving colonial dynamic, it requires no brute force for the surrender of individuals, but rather the promotion of “a

‘shared culture’ between the colonizer and the colonized” (idem, p.101). Accordingly, it is anchored in narratives that translate data exploitation into more acceptable and less questionable terms. Conforming to Couldry and Mejias, it depends on three particular ideologies: the one that presents internet connection as a natural process; that of datafication of every stream of life as the way to make daily life more efficient; and the one that heralds the convenience of personalization, which makes “tracking and surveillance seem attractive” to people (2019, p.16). Here again “the myth that all this is inevitable and that today’s infrastructures of connection and data extraction fulfill human being’s collective potential in some transcendent way” is vital to the seamless functioning of this logic (idem, p.17).

Another aspect of data accumulation is that it is paving the way for a new economic and social order, which is evident by the extent it has been shaping social and labor relations (Couldry & Mejias, 2019, p.12). An example is that social life is becoming ever more dependent on interactions in social media (Zuboff, 2019, p. 445). Thus, the continuous promotion of one’s image in the digital sphere - i.e. the “commodified representations of the self” (Thatcher et al., 2016, p.14) - has acquired a greater relevance for maintaining social life. And this occurs to such an extent that in some cases, if a personal experience is not translated into reactions in the social media, then this experience is perceived as if it had not even happened (Zuboff, 2019, p. 455). In addition, working relationships are increasingly subject to digital surveillance, both inside and outside the workspace. For instance, some jobs today are completely dependent on the use of smartphone applications that require internet connection to track, evaluate and condition the action of workers, as in the case of Uber drivers and other gig workers. Better remuneration and working conditions become thus a matter of rewards given to individuals that behave accordingly, and penalties are expected to those who do not (Couldry & Mejias, 2019, p.65) - e.g. having access to the app denied or suspended. As the Kreuzberg activists have observed, in today’s economic logic, human beings are a widely exploited resource that can play simultaneously the role of customer, employee and data donor (Google Campus & Co. verhindern, 2018, March 20).

However, authors agree that data colonialism or surveillance capitalism are not the only possible forms of Internet and data appropriation. They recall that the implementation of the Internet on a large scale (world wide web - WWW) was motivated by values quite in opposition to the ones that are dominant today. Castells (2015) explained that the Internet “was deliberately designed by scientists and hackers as a decentered, computer communication network able to withstand control from any computer center” (p.259). Thus, at least during the early days of the WWW, it was advocated as a tool that could bring further autonomy and freedom to the human being while avoiding the concentration and centralization of information. Its structure, in network, would also provide for new societal interactions that could promote to some extent civic empowerment, as in the case of networked social movements (Castells, 2015). The issue then is that the prevailing political and economic forces have pushed the annexation of data flow infrastructures and its sources (human experiences) to their domain of control, this being the main trigger of Internet technology advances today.

Along this course, data became quoted as “the world’s most valuable resource” (Fig. 41) and some few internet companies have gathered the means to control the path of technological progress. In this sense, concentration of power is both the reason for and the product of large investments in research and development, from university funding to projects of startups, which is a way to have privileged access to technological innovation while undermining potential criticism or competition – thus, eliminating friction (Zuboff, 2019, p.126). Tech giants also have expanded their operations across the five key domains of their sector: “hardware, software, platforms, data analytics and data brokerage” (Couldry & Mejias, 2019, p.50). Therefore, they are able to dominate the internet networks “both as sellers and buyers” (idem, p.47). One can observe, for example, that despite the existence of a multitude of websites, there are very limited “options for choosing which platforms to participate in” when looking for videos or joining a social network (idem). Currently, the five biggest corporations in this field are Amazon, Apple, Facebook, Google (together with its parent company Alphabet) and Microsoft, each of them developing its own techniques to put into

practice the dynamics described in this section. Still, these are not the only companies that participate in surveillance capitalism nowadays. Over the last decade entrepreneurs from all sectors - including non-digital ones - have been compelled to adhere to this model of business (Zuboff, 2019, p.171).



Fig. 41 Edition of “The Economist” on the value of data, May 2017.

Source: www.economist.com/weeklyedition/2017-05-06

4.1 | THE INTERNET IN THE URBAN SPACE

In the context of urban entrepreneurialism, data extraction has found its way into the city-making through the promotion of digitalization and the diffusion of an smart city ideal. Top up it another way, the logic presented in the previous section has driven what Shaw and Graham (2017) named as “urbanization of information”, a process in which data accumulation has taken a central role for urban development. According to Morozov and Bria (2018), cities have engaged in “smart” solutions often motivated by “normative” or “pragmatic” reasons (p.6). As observed in Berlin, frequent arguments for implementing Internet technologies in

the city are the debureaucratization of public services and the efficient use of urban resources. It is also often justified as a means to improve public safety, including the use of drones and “policing robots”, which has contributed for “a context of heavily militarized urbanism” (idem).

Aligned with Harvey (1989), Morozov and Bria (2018) argue that, most of all, it is the neoliberal imperatives that have compelled local governments to partner with tech companies. Due to interurban competition, cities are always seeking the best performance in international rankings and indicators, one that brings them better credit rates and attracts investors (p.10). In this rationale, despite the political orientation of rulers, local governments may adhere to surveillance capitalism due to two complementary pressures: the need to quantify the cities’ performance – which motivate all kinds of data collection – and the need to guarantee their position in the international market by producing and applying innovative policies, such as the ones involving digital inclusion and the digitalization of public services. In addition, extensive implementation of smart technologies has been an attractive proposition in the midst of austerity policies, when budget deficits justify increasing taxes and cutting welfare spending. In this scenario, the recurring claim is that the digital transformation would be a way to unlock “the creative and entrepreneurial potential” of the city’s residents (Morozov & Bria, 2018, p.20). As these authors emphasize, the critical point is that such a discourse contributes to redirect the responsibility for overcoming socioeconomic deprivation, which thus becomes more of a matter of individual commitment to digital innovation than a question of public investment in social welfare (idem).

Furthermore, besides the initiatives coming from the public sector, an increasing number of private platforms have mediated the daily activities of urban residents. For example, people who take their smartphones connected to the Internet with them throughout the day can make use of apps for all purposes, whether it’s for getting directions, checking e-mails, commuting, monitoring health, shopping, paying bills, interacting on social media, watching videos, checking weather forecasts, ordering food, finding a nearby facility, finding a home, dating or learning new languages. Many apps can also be accessed through laptops, watches

and several other electronic equipments that are connected to the Internet, such as home assistants, TVs and fridges. Taking into account the uses of online platforms for education and work purposes, computer mediation has been intensified even further. Even if one cannot afford mobile Internet, the growing number of free Wi-Fi areas appear to meet the imperative to stay online as much as possible. Therefore, when we consider the network of applications and devices through which the Internet is present in the urban space (Kellerman, 2019), we discover that the conditions to commodify human experiences (Thatcher et al., 2016, p.10) are already quite “vast” and “varied” (Zuboff, 2019, p.199).

Technological improvements that enable the communication between diverse kinds of objects (internet of things - IoT) and maximize the efficiency of data processing (Artificial Intelligence - AI) have been crucial for the recent incursions of surveillance capitalists in the urban environment. That is because these are core technical apparatuses for ensuring that “real-world activity is continuously rendered from phones, cars, streets, homes, shops, bodies, trees, buildings, airports, and cities back to the digital realm, where it finds new life as data ready for transformation into predictions” (Zuboff, 2019, p.200). As an example, thanks to advances in these fields, nowadays companies like Google have the means to analyze in real time the correlation between a behavior and the place where it occurs, and when needed, to induce a certain behavior, such as which route an individual take or from which store one buys (idem, p.241) – which may appear for users as personalized services (Couldry & Mejias, 2019, p.16) based on geolocation.

From the point of view of social justice, a critical point of such developments is that they tend to deepen inequalities across geographies and social groups. Looking more closely at the mechanisms of data processing, Couldry and Mejias (2019) point out that the purpose of these operations is always to distinguish communication patterns. In addition, the initial inputs to differentiate data are not neutral, but based on the interests and assumptions of those programming it. Thus, this is a process always framed by “existing structures of social discrimination” (p.25). Similarly, Vidushi Marda (2019) warns that these systems can overlap

in harmful ways with the ‘fundamentally imperfect, discriminatory and unfair world [...] and the underlying structural and historical legacy’ in which they arise (p.10). Thus, in order to avoid the reinforcement of existing inequalities, it would be essential to transform these operations “in a bottom-up, context-driven way” (idem, p.13).

Finally, the studies presented so far highlight that the logic underlying the vast use of the Internet in cities has critically changed the way that space is produced. In this sense, both corporations and states have worked towards gathering power and knowledge enough to “engineer the context around a particular behavior and force change that way” (Zuboff, 2019, p.294). Hence, authors often emphasize that such objectives of ordering “the social world continuously and with maximum efficiency” (Couldry & Mejias, 2019, p.23), through the means discussed in this chapter, is quite detrimental to individual autonomy, since it delegates to technology - i.e. to those controlling and designing it - the role of defining what is best for all individuals in a society. Moreover, while city administration pushes forward smart-city projects and tech companies become the providers of all sorts of digital services to urban dwellers, states struggle to keep up with the speed of digital innovations, so that proper regulation of technology companies has always lagged behind. This way, while urban residents are becoming increasingly monitored, those who profit from surveillance have used the rapid development of Internet technologies to their advantage, as an excuse to escape regulation and accountability to society (Zuboff, 2019, p.101).

1.2 | GOOGLE & CO.

The company that faced demonstrations in Kreuzberg plays a prominent role in the current logic of Internet use and development. As Zuboff (2019) demonstrates, Google is the pioneer of surveillance capitalism. Consequently, the corporation has applied all the mechanisms listed in section 4.1. and the imperative to extract data pervades every aspect of its operations. Since the early 2000s, when it launched the

business model based on the trade of targeted advertising, Google has grown from a firm located in Silicon Valley to one of the largest technology corporations in the world (Couldry & Mejias, 2019, p.49). Although it started as a search engine and is still leading this sector, Google has also driven its mission to “organize the world’s information and make it universally accessible and useful” (Google, n.d.) to vast domains that extend beyond the digital realm (Zuboff, 2019, p.227). As an effect of this expansion, in 2015 the tech giant was restructured and became a subsidiary of Alphabet Inc, which is run by the same founders of Google (Alphabet, n.d.), thus recent information regarding Google often refers to “a huge network of companies” under Alphabet’s control (Anonymous, 2018, p.4). While Google has become a famous brand, there is no precise picture of the projects and companies that make up the Alphabet group. Yet activists have been working to figure out which fields its projects and businesses extend into (Anonymous, 2018; NoGoogleCampus, 2018, p.9).

A key criticism addressed to Google is that it has built its empire through various interconnected mechanisms that keep users, customers and professionals dependent on its services or its funding, which makes it very hard for many people, companies and institutions to escape the influence of this corporation, let alone challenge it (Anonymous, 2018, p.18; Morozov & Bria, 2018, p.18; Zuboff, 2019, p. 341). The first major dependence derives from the extensive use of its search engine. Over the years, people have progressively been conditioned “to google” any kind of question that pops up into their minds. As a result, individuals have become reliant on the way the search engine indexes their queries and provides them with answers. Another feature relates to the integration of all digital services, so that individuals always remain somehow logged on to Google. For example, everyone who has a smartphone with the Android operating system is, by default, linked to Google, either because of the Android’s main features that require having a Google account, such as the Play Store, or by virtue of other applications that are offered for free and come installed automatically on the mobile phones without the option to uninstall, such as Youtube, Gmail, Drive, Maps and Chrome. The system also offers a personal assistant which, when activated, can

perform online tasks via voice commands. These platforms are then connected to a single account that continuously records the activities of that individual. Although presented as a convenience, this mechanism makes it harder for users to disconnect from Google, while ensures that the company is able to track and extract data from individuals as much as possible, anywhere, at any time. Similarly, a large number of businesses are connected to Google to some extent. Either because they rely on Analytics and the services of targeted advertising the tech giant provides, or because their inclusion on Maps and their evaluation on Google's search page can be a crucial competitive factor for them.

In terms of research and technological development, Google secures some level of dependency by providing grants and programs that support innovation for many professionals, entrepreneurs and institutions (Anonymous, 2018, p.5). It covers from donations to research institutes, as is the case of the Alexander von Humboldt Institute for Internet and Society in Berlin (Alexander von Humboldt Institut für Internet und Gesellschaft, n.d.), to the specific funding for AI development, which supports "the most talented founders building AI-powered companies" (Gradient Ventures, n.d.). Through these mechanisms, the tech giant has continuous access to high skilled professionals and innovative technology developed world-wide, while fostering its image as the company that does "the right thing" (Alphabet, n.d.). However, Kreuzberg activists emphasize that Google has co-financed scientific studies in other areas to influence the public debate in a targeted way (NoGoogleCampus, 2018, p.8), so its presence in this sector may also serve as a tactic to prevent criticism.

Furthermore, the company has specific strategies for incubating technological innovation. For example, the program Google for Startups (n.d.) supports small tech businesses and "a global network of leading tech hubs, accelerators, and diversity-focused organizations across 125 countries" by providing them with funding, facilities and digital resources. As part of this program, the tech giant has built seven campuses around the world to this day. As planned for the campus prevented in Berlin, these spaces are the "homebase for growing startups", where they are offered

"free training and mentoring", as well as support "to make progress on their big ideas" (Google for Startups, n.d.). In addition, such structures are aimed at nurturing startup ecosystems (Grove, 2016, November 23). That is, it gathers a diversity of startups in spatial proximity and provides them with opportunities to network, thus helping to "solve complex problems" and accelerate technology development (Google for Startups, n.d.). By accessing new ideas and projects, what the tech giant cannot build, it can buy, so the most successful startups and workers taking part in these projects are eventually incorporated to Google (Zuboff, 2019, p.149). In this sense, activists have argued that Google has been promoting a startup culture worldwide by having as its goal to be close to the start-ups in order to recruit profitable workers, buy promising companies or take a financial stake in them (TOP B3rlin, 2018, p.9).

Over the years, Google's incursions into the urban space have been quite varied, which have contributed to the construction of increasingly "ubiquitous architectures of [data] extraction and execution" (Zuboff, 2019, p.226). A remarkable case is the digitalization of the public spaces in many cities through the street view project, which generated diverse local contends, specially in Germany (idem, p.139). The company also has projects for the city that involve the supply of fiber optic networks, self-driving cars, smart home heating regulators, as well as the automation of urban systems through AI and facial recognition (Anonymous, 2018, p.9). Moreover, the tech giant has a subsidiary dedicated exclusively to implementing its vision in the field of urban development. Sidewalk Labs defends the idea that by putting "technologists and urbanists on the same team you have the potential to transform the urban environment" (Sidewalk Labs, n.d.). Accordingly, the company offers internet services that range from the provision of free Wi-fi zones and traffic management systems to tools of urban design, as "performance-based zoning", and "dynamic parking" – an online marketplace in which costs for parking would vary in real time according to demand (Zuboff, 2019, p.228). The project that was canceled in Toronto would be Sidewalk Labs' major experiment, where an entire district would be shaped and managed by this technological vision (Sidewalk Toronto, n.d.). Yet, what Morozov and Bria observe is that through diverse partnerships with municipalities,

Google has been improving its means to extract and processing data while keeping cities dependent on its services (2018, p.18).

Summing up the power and role that Google has acquired in the restructuring of cities and society, Shaw and Graham (2017) point out that:

Through innovative information technologies, Google can control urban centralities and political representations, homogenize urban space, embed abstract advertising products in material space, prioritize and valorize some (digital) relations over others, harness surplus production through technological innovation, and dominate the digital process of reducing concrete social practice to abstract information (p.921).

Likewise, considering all these means by which Google services penetrate the daily life in cities, we find that the corporation has a network of integrated channels for data extraction that allows it to continuously transform human experiences into predictions and thus shape spaces and behaviors so as to guarantee its future outcomes (Zuboff, 2019). Therefore, despite the “newly dominant ideology” that Google is “serving the general interest of the city” (Shaw & Graham, 2017, p.921), what critics show is that the tech giant has created relationships of dependence on its products and through them has driven a particular vision of the human future controlled by its technology (Couldry & Mejias, 2019).

5 | DISCUSSION

From the analysis of actors, elements, processes and the context of the dispute in Kreuzberg, the discussion on emerging conflicts involving the Internet industry, the urban space and the civil society develops in two parts. Considering the case study, the first part confronts the narratives that drive the ubiquitous implementation of Internet technologies in cities with the perceived impacts that these transformations already have or may have on the daily lives of urban residents. The second part addresses the contrast between the dominant narratives and the alternative values that the social movement has defended and practiced, in terms of spatial development, social organization and Internet appropriation. In particular, this part focuses on how the mobilized actors have approached values such as autonomy and participation - both in terms of Internet use and individual rights. This division aims to highlight the reasons why Google was rejected in Kreuzberg, while outlining some aspects of the social movement that seem to have contributed to counteracting the tech giant and its discourses.

1.1 | GENTRIFICATION AND BEYOND

More than just a case of preventing Google from occupying a building in Kreuzberg, the content analyzed in the previous chapters signals that the project for the *Umspannwerk* also served as a symbolic target through which local residents showed dissent from broader processes taking place in the city. This disagreement emerged in relation to the local effects of neoliberal policies as well as to the increasing digitalization of urban life promoted by public and private actors. This



is confirmed, for example, by the breadth of discussion prompted by the various initiatives against the Google Campus. Campaigners have raised concerns that involved both the pattern of urbanization triggered by the local investments in the digital economy (NoGoogleCampus, 2018; TOP B3rlin, 2018) and the particular mechanisms of surveillance and data colonialism employed by Google as a tech giant (Anonymous, 2018). Moreover, findings suggest that locals have experienced the overlapping of two processes: firstly, gentrification and evictions resulting from the real estate appreciation triggered by the arrival of digital and creative industries in the neighborhood; secondly, the effects of increased control and surveillance of daily life made possible by this same digital sector.

In that sense, while it is already possible to account for the economic growth generated from the incentives to startups in Berlin (dealroom, 2019), the contribution of digitalization to improve the well-being of society has been contested (NoGoogleCampus, 2018, p.20; Morozov & Bria, 2018). Similarly, along with the protest against the Campus, activists have questioned the lack of critical debate and civic participation regarding the implementation of smart policies in Berlin. According to them, all the new business locations, including *Umspannwerk*, are puzzle pieces compounding an image of Berlin as a Web-Tech paradise where the industry can expand without problems, as if there were no conflict with the needs and opinions of local residents (NoGoogleCampus, 2018, p.3). Furthermore, the argument is that the policies supporting the settlement of Google and other internet companies in Berlin have contributed to displace local communities – as is the case with Kreuzberg and its surrounding areas – rather than improving life conditions (idem).

Besides the social impacts of gentrification, protesters also underlined that digitalization implies a continuous surveillance of society, which affects labor conditions and individual's autonomy. For example, taking into account that vast and varied extraction of data provides the conditions to predict and shape behavior towards guaranteed outcomes (Zuboff, 2019), locals pointed out that states in partnership with internet companies could use this mechanism to prevent uprisings. That is, they could join forces to fight social movements before they even

exist (Google Campus & Co. verhindern, 2018, March 3). An always online life also provides for more precarious work relations, whether because workers' performance becomes even more monitored or because labor rights are replaced with new ideologies of flexible and mobile work which, as well as the "uncontract" (Zuboff, 2019, p.218), contribute to exempting technology companies from complying with labor regulations. Campaigners have observed such effects among startup employees (NoGoogleCampus, 2018, p.5), as well as among workers of food and package delivery companies (TOP B3rlin, 2018, p. 23).

Furthermore, as the city is increasingly submitted to the control of internet companies, the urban itself is being transformed into a platform for collecting data from human experiences (NoGoogleCampus, 2018, p.23, Zuboff, 2019, p.227). In this regard, the perception of activists is that the ongoing digitalization in Berlin is turning urban residents into guinea pigs in a laboratory, where the web-tech companies can have complete access to urban life and can promote a complete reorganization of it (NoGoogleCampus, 2018, p.21). Likewise, considering the dominant vision about digitalization in the city and the power Google holds in this sector, the activists in Kreuzberg targeted the tech giant not only by virtue of the startup campus itself but because they recognized that Google's incursions in Berlin could have "profound and lasting" consequences to urban residents (Anonymous, 2018, p. 21). A similar view is shared by the initiative Counter Campus, which noticed that the new monopolies of tech giants are also new political powers. They are becoming quasi-state actors and that is exactly how they are increasingly being interpreted: as powers that determine how the society of the future will look like. (TOP B3rlin, 2018, p.34).

Hence, a closer look at how Google sees the city of the future, e.g. in Sidewalk Labs projects, showed that the urban residents of a Google-City figure as permanent data donors (NoGoogleCampus, 2018, p.20). According to the ideals of surveillance capitalists like Google, everyday life in the city "is set to become a mere canvas for the explosion of a new always-on market cosmos dedicated to our behavior and from which there is no escape" (Zuboff, 2019, p.268). In other words, Google foresees a city

totally controlled by Internet technologies, so that all human behavior can be converted into commodities without resistance (Thatcher et al., 2016, p.6; Zuboff, 2019, p.514). Aware of this prevailing perspective, campaigners warned that this is a “strategy of total appropriation” and “not being a part of it is getting more and more difficult” (Anonymous, 2018, p.18). Moreover, not preventing the realization of such ideals in Berlin would mean accepting that individuals’ access to public goods and services gradually becomes dependent on the interests of a corporation (NoGoogleCampus, 2018, p.20). In this sense, we find that, along the process of mobilization in Kreuzberg, activists were able to identify that Google is pushing forward a new “urban ideology” that masks its economic imperatives and present it as the result of a “necessary evolution” (Castells, 1977, p. 430). This means that they recognized that this new ideology has been displacing “the axis of the contradictions towards a general mobilization of society” (Castells, 1977, p. 430) through the imposition of a pattern of technological progress that seems inevitable (Zuboff, 2019, p.224).

Meanwhile, research findings suggest a parallel to what Zuboff (2019) described as the “dispossession cycle” and the process through which Google expanded its operations of data extraction in Berlin. The company started the stage of incursion in the city’s startup sector in 2012, through the partnership with the Factory (Grove, 2016, November 23). The stage of habituation occurred without problems until the next step of incursion, with the release of the plan for the startup campus in Kreuzberg. After the resistance found in the district, the step of adaptation entered the scene, that is, Google withdrew the campus and adapted it to more acceptable businesses in that context, I.e. to non-profit organizations (Betterplace et al., 2018, October 24), which, by the way, has not gone unnoticed by the social movement (GoogleCampus & Co verhindern, 2018, November 15). Redirection came in two ways: through the opening of offices in Mitte three months after the withdrawal from Kreuzberg (Bremer, 2019, January 24), which was also criticized by the local activists (@counter_campus, 2019, January 22), and through the continued partnership with the Factory in its new startup hub dedicated to IoT (Factory Berlin, n.d.), which is located just some blocks away from the *Umspannwerk* in Kreuzberg (NoGoogleCampus, 2018, p.12).

Therefore, according to the arguments found during my empirical research, most of the motivations to reject the Google Campus in Kreuzberg were related to potential impacts that the convergence of smart city strategies implemented in Berlin and the extension of Google’s data-driven operations in Kreuzberg could bring to the everyday life of locals. In effect, when connecting the movement’s argumentation with the critical theory examined, we find that such a combination of factors point out to a pattern of urbanization that thrives in control (Shaw & Graham, 2017), surveillance (Zuboff, 2019) and colonial relations (Couldry & Mejias, 2019). That is, the conjunction of inter-urban competition imperatives, which counts on the commodification of spaces and identities (Harvey, 1989), and the economic imperatives of data extraction, which counts on the commodification of human experiences (Thatcher et al., 2016; Zuboff, 2019), can have deep implications to socio-spatial inequalities in the city. For instance, in a scenario where the access to public services depend on internet connection, not being online along the day has become itself a means of urban exclusion, and this is valid both for those who refuse to be connected all the time as to those that do not have access to smartphones and internet connection.

Likewise, campaigners in Kreuzberg have outlined that as “time, relationships, work and life in general are increasingly moving into the realm of the virtual”, the framework of individual action becomes progressively more “determined by the design” of online tools than by the individual himself (Anonymous, 2018, p.17). This means that as urban life becomes data-driven, more of an individual’s autonomy over his or her own choices is delegated to those who program and control the digital space. By the same token, looking at data processing mechanisms, one finds that their own methods can reinforce social inequalities in many ways, since they depend on inputs that are biased according to the views and interests of those who design them (Couldry & Mejias, 2019, p.25). Additionally, Zuboff (2019) observes that the logic of surveillance capitalism is anchored in a fundamental inequality of knowledge, which separates the “tuners” from those who are “tuned” (p.519). That is, it is rooted in an asymmetry that divides those individuals who have the resources to shape behavior and those individuals whose behavior is

continuously shaped. Yet, Couldry and Mejias argue that data colonialism reiterates previous forms of expropriation, so “the poor (always a racialized and gendered category) continue to pay a havier price” (2019, p.68). Aligned with theory and recognizing that such asymmetry is juxtaposed with economic imperatives of dominant groups, the protesters pointed out that the undertaking of tech giants provide for real-estate evaluation (as occurring in Kreuzberg) at the same time that contributes to devalue wages and working conditions, thus those already facing economic precariousness and other social inequalities are negatively affected by increasing digitalization (TOP B3rlin, 2018, p.12). Therefore, the case of Kreuzberg highlights the overlapping of several struggles: those of housing, business and lifestyles that are displaced by gentrification processes; the depreciation of working conditions and the expropriation of the individual behavior (once it is transformed into data).

Moreover, people are already adapting to algorithms designed to extract their data: wearable devices tell them when to exercise or what to eat, and the on-demand economy has managed to make any social practice capitalist (NoGoogleCampus, 2018, p.7). Thus, as the commodification of human experiences advances, every social routine of urban dwellers is gradually converted into information (Shaw & Graham, 2017), which means that the representations of space – i.e. abstract space – are taking over the space of social practices (Lefèbvre, 1991). Further, critical theory emphasizes that the promotion of data colonialism is driving the extermination of human autonomy and replacing it with a new social knowledge “that lies entirely under corporate control” (Couldry & Mejias, 2019, p.190). Accordingly, the major impulse that prompted individuals to prevent the startup campus in Kreuzberg seems to derive from the awareness that the businesses under Google’s control have a great impact in the autonomy and self-determination of individuals (Anomymous, 2018, p.21).

1.2 | SPACE FOR SOLIDARITY

Power is regrouping, exploitation is being restructured. It is tempting to say that everything used to be better before. But the actual power relations remain, they only change their face, their strategies and their form. They are becoming smart, positive and always useful. Identifying an enemy is becoming more and more difficult. In the past it might have been a slaver with a whip or the boss intimidating warnings. Today, however, it’s all your friends and the instruments of control that allow you to be with them. This new orientation makes it a bit complicated, since everything is voluntary and we are all part of it. But we must not forget that it is possible to follow the consequences of this knowledge ourselves. There are still people and structures that carry the main responsibility for these structures and can also be attacked. Usually they are the ones who profit most. (Anonymous, 2018, p.19)

In line with theoretical discussion (Castells, 1977; 2015; Lefèbvre, 1991; 1996), research findings demonstrate that the mobilization in Kreuzberg developed from collective debates and a shared awareness of the new meanings mobilized by dominant powers - as the above quote demonstrates. Accordingly, they were able to identify that tech giants, such as Google, are prominent actors in the ongoing transformation of their lives and spaces. Furthermore, the material analyzed suggests that the activists had a common perception that the emerging pattern of space production was driving them to a further deprivation of rights and resources. Overall, they pondered that dominant groups promoted a growing dependence on technological apparatuses at the cost of taking away the autonomy of individuals. In effect, when juxtaposing the movement’s discussions with critical theory, we find that the dispossession of individual autonomy is what enables the commodification of human behavior, thus justifying the logic in course (Couldry & Mejias, 2019, Thatcher et al., 2016, Zuboff, 2019). Complementarily, the understanding of some activists was that the “meaning of freedom as the greatest possible autonomy, self-organization and mutual responsibility [was] turned upside down” and used as a

mean to prevent collective resistance to domination and exploitation (Anonymous, 2018, p.18).

At the same time, the sources of public participation offered by public institutions, such as the ones presented in the Smart City strategy (Senate Department, 2015, p.23) and the purpose of round tables to negotiate the Campus (Google Campus & Co verhindern, 2018, July 30), were perceived as insufficient measures to tackle the problems of displacement and injustices experienced in the daily lives of the individuals mobilized. In this sense, the reflection was that democratic participation in the city-making has been essentially affected by the processes of digitalization, once it is dominated by internet companies that have private interests (NoGoogleCampus, 2018, p.23). That is, “why would citizens have any say over their communities and the long-term implications of how luxury high-rises, hotels or a residential building going commercial could affect rents and local businesses as long as an algorithm is satisfied with noise thresholds?” (Zuboff, 2019, p. 228).

Contesting the dominant values at play, the mobilization arose from the belief that the shaping of the city and technology is in the hands of society (NoGoogleCampus, 2018, p.23), so their values of an alternative future should be actively defended and deployed from below. In all the content I studied, the vision of an alternative city was primarily based on solidarity. Campaigners also fought for the abolition of any kind of domination and exploitation, as well as for values such as autonomy and self-determination (Anonymous, 2018, p.21). Thus, the objectives of this social movement pointed out “towards an alternative urban meaning”, to an “alternative city”, as Castells noticed at his time (1983, p. 322), or as Mayer (2012) proposed, towards a right to “another city”. In line with this, some activists even positioned themselves globally and locally engaged in the fight for “the right to the city” (TOP B3rlin, 2018, p.45) in a closer sense to what Lefèbvre (1996) has supported, that is, with the goal of maximizing use value of everyday life in the city.

Besides the announcement of such premises in booklets and other campaign material, the mobilization process showed that, despite the

diversity of groups and perspectives involved, values as autonomy and solidarity also permeated the practices of the individuals mobilized. This was confirmed by the broad spectrum of groups involved, the absence of leaderships and the recurring times the different initiatives and interviewees referred to each other in a gesture of solidarity and support. Activists also put into practice their premises regarding the alternative appropriation of internet networks. That is, they developed their campaigns in a mostly decentralized format, e.g. through the use of Mastodon.social. According to what was observed in the first part of this research, this was a result of the engagement of individuals with specialized knowledge in IT, as well as an outcome of the collective knowledge produced during offline meetings where decentralized tools were discussed. By appropriating the online space mostly out of the centralized channels of tech giants – except by the use of Twitter – we can argue that this movement was able to create some “friction” to the existing trend of being inevitably connected to centralized internet networks (Zuboff, 2019, 520). Further, as Shaw and Graham (2017) proposed, through their campaigns, local meetings and decentralized structure (both online and offline), they seem to have been able to enunciate dissent, refuse to act accordingly and “transcend the fantasies” of connectivity that have emerged as the dominant regime for urban society (p.916).

Also considering the practices of the movement, it is observed that continuous debates in online and face to face meetings – which had been going on since before and were extended after the mobilization period - have contributed to expand individual’s awareness about the mechanisms of domination and exploitation they were challenging, thus providing for the development of alternative means to face their opponent. One example is that, considering the relevance of image-enhancing in the neoliberal context, protesters directed their tactics towards shading the ideological purity of the corporate image, which was then considered a key element for their success in the contend against the Campus (Google Campus & Co. verhindern, 2018, November 15). Moreover, another remarkable feature of this social movement is that individuals were able to translate their alternative values into the structure of mobilization. That is, they were able to organize through egalitarian and solidary relations despite

the spectrum of differences between them. Taking into account Mayer's observations about the collective actions in Kreuzberg (2015, p.8), we find that this is a structure that has already been nurtured in the district for years and has contributed to slowing down the process of deepening social inequalities there. Furthermore, the coalition of community-based groups with cyber activists may be an example of how contemporary mobilizations have united forces to oppose the technological attack, the "neoliberal economic and urban policies" as well as "social injustices of various kinds" (Novy & Colomb, 2012, p.5).

Spatial proximity and face-to-face networking revealed to be essential for both sides in dispute. While Google (Grove, 2016, November 23) and the city's online channels (Berlin Partner, n.d.) have promoted the development of a startup ecosystem in the city, the material analyzed shows that Berlin counts on a network of individuals and collectives that are willing to join forces when the profit-based urbanization threatens individual autonomy of locals (Make Amazon Pay, 2018, March 20). Though in both cases the value of face-to-face relationships seems to be related to some extent to the development of knowledge, for the first actors the encounters in the urban space are motivated by the impulse of innovation, while for the second, such a network helps to cultivate shared values and community (Kiez) relations. As one of the initiatives has argued, the face-to-face contact, conversation and brainstorming together enable that half-baked ideas cross-fertilize each other, creating something that is more than the sum of its parts (NoGoogleCampus, 2018, p.10). Nevertheless, the movement proved to extend beyond local issues, connecting to similar causes across geographies such as the one in San Francisco, thus the online network relations also structured the campaigns and contributed to the mobilization's outcomes (Castells, 2015). In effect, findings suggest that the combination of offline and online networks may have helped to ensure some stability to the movement by allowing individuals to stay engaged and connected even after Google's retreat. Likewise, empirical research also showed that the diversity of networks, in terms of people and spaces connected, helped develop the participants' knowledge about the impacts of tech giants on urban space, increasing the reach of the struggle and expanding the repertoire of actions.

6 | CONCLUSION

The research has identified that the biggest operators of Internet are distinct agents in the production of urban space and their installation in cities can trigger ambiguous consequences. As these corporations centralize unprecedented means to control abstract space and their actions are motivated by profit, so their vision of a future city conflict with the needs of many social groups, specially with those of individuals already suffering the consequences of uneven urban development. Moreover, counteracting the incursions of tech companies in the city raise a singular challenge to social movements because it requires autonomous practices of resistance in a scenario where the awareness of society has been continuously distracted. That is, in a context where human behavior has been dispossessed from autonomy, then annexed and exploited as an asset of those moving data colonialism forward. Particularly, the case study analyzed shows that the vast deployment of Internet technologies in Berlin may change everyday life of Kreuzberg and surrounding residents in negative ways, whether by accelerating gentrification processes, by worsening working conditions or by improving the conditions to surveil, control and discriminate individuals. This perception was enunciated not only in interviews and in the movement's agenda, but also in the topics that were of most interest to @counter_campus supporters. The activists against the Campus in Kreuzberg associate these combined processes of displacement and increasing surveillance to the multiplication of big technology companies in the city and the dominant view of city representatives that the more everyday life is translated into data, the better (NoGoogleCampus, 2018; TOP B3rlin, 2018).

In addition, the struggle in Kreuzberg reiterates that the production of urban space proceeds from the confrontation of opposing projects,



in which Internet technologies have played a central role. On the one hand, there is the program of a city increasingly profit-oriented, based on exchange value and driven by smart technologies. On the other hand, a project that stands for solidarity, autonomy and social justice, emphasizing the use value of spaces and practices, as well as a decentralized Internet. Therefore, considering that urban spaces are the result of contradictory projects, what is observed in the struggle of the movement against Google Campus - through the documentation they produced - is that they were able to identify the dominant meanings and powers shaping their spaces, and developed their mobilization around alternative values that exposed and counter-powered such prevailing structures. Accordingly, they underlined particular features of the profit-based urbanization in course, while putting in practice, in the space disputed, the alternative meanings they have been collectively producing. Confirming the initial premises, the observed movement appropriated the Internet both as a means of network mobilization (Castells, 2015) and as an urban resource over which civil society should demand access and control (Shaw & Graham, 2017).

From the findings gathered with the examination of practices, values, structures and discourses of the campaign anti-Google, followed an analysis that helped to comprehend the emergence of that movement and their reasons to fight. Understanding the particularities of the urban context and the way Google conducts its internet operations was then an outcome of both the lessons learned from campaigners' speeches and the documents and theory accessed, which included references brought by the activists. Furthermore, the study presented here has tried to bring into conversation the knowledge collectively practiced and produced by the individuals engaged in that social movement and the critical academic analysis about the impacts of the internet on spaces and lives. Joining scholars such as Couldry and Mejias, the main goal of such enterprise was to contribute to develop a "collective process of research" that could be "more political, more interdisciplinary, more practical" and less restricted to academic boundaries (2019, p.208).

Accordingly, it is worth reinforcing that the analysis derived from this case - an object of reality - as well as the results and conclusions

presented here, are not an exhaustive assessment of the phenomena observed. In other words, this is a work framed and limited by the researcher's capabilities, context, scope of research, time and resources available. For example, although the study was developed in Berlin, due to my basic command of the German language discourse analysis and theoretical framework were to some extent restricted to the availability of content in English. Also, the analysis of the social network depended on the support of researchers specialized in the computer science field, so the results presented were limited to what I could learn and develop from this supervision. In addition, much of the on-site mobilization was already over at the time the research started, thus both the quantitative and the qualitative analyses were conditioned to documentation of past events. However, in an attempt to compensate for some of these issues, the research was based on a more varied combination of methods and sources, which allowed for new bridges that would not otherwise have been possible.

Finally, the discussion developed throughout this work covered the context of a wealthy Western country, i.e., the global north, and this frames how the impacts of Internet were experienced and challenged (Couldry & Mejias, 2019). That is, since the operations of the Internet giants extend to many cities around the world, the case study must also be understood within its positioning in a global context. This factor therefore highlights the need for further research into the implications of "urbanization of information" (Shaw & Graham, 2017) from other perspectives, including the plurality of urban struggles and alternative projects underway in the global south. In view of this, while some questions are answered, many others open up. How is the digital attack perceived and challenged in other cities? How do tech giants are shaping urban development in these locations? To what extent do data-driven cities reproduce and reinforce older forms of social and spatial inequality and discrimination?

REFERENCES

- Alexander von Humboldt Institut für Internet und Gesellschaft. (n.d.). Finanzierung. Retrieved August 12, 2020, from <https://www.hiig.de/finanzierung/>
- Alphabet. (n.d.). Homepage. Retrieved August 3, 2020, from <https://abc.xyz/>
- Amt für Statistik Berlin-Brandenburg (2018). kleine berlin-statistik. Retrieved August 03, 2020 from https://www.statistik-berlin-brandenburg.de/produkte/kleinstatistik/AP_KleineStatistik_EN_2018_BE.pdf
- Anarchist Library. (n.d.). Homepage. Retrieved July 29, 2020, from <http://theanarchistlibrary.org/special/index>
- Anonymous. (2018). And the world shall become Google: Google's digital attack and its consequences. Shitstorm – Anarchistische Zeitung. Retrieved from <https://theanarchistlibrary.org/library/anonymous-and-the-world-shall-become-google>
- Avignon Capital. (2020, February 25). Avignon Capital completes sale of the Umspannwerk Kreuzberg. Retrieved August 3, 2020, from <https://avignoncapital.com/news/completes-sale-umspannwerk-kreuzberg/>
- Barns, S. (2020). City Reverberations. In S. Barns (Ed.), *Platform urbanism: negotiating platform ecosystems in connected cities* (pp. 53–74). Palgrave.
- Berlin. (n.d.). Kreuzberg. Retrieved August 3, 2020, from <https://www.berlin.de/en/districts/kreuzberg/>
- Berlin HYP & CBRE. (2020). Housing Market Report Berlin 2020. Retrieved August 3, 2020 from <https://www.cbre.com/research-and->

[reports/CBRE-Berlin-Hyp-Housing-Market-Berlin-2020](#)

- Berlin Vs Amazon. (n.d.). Homepage [Blog]. Retrieved July 27, 2020, from Berlin Vs Amazon website: <https://berlinvsamazon.com/>
- Berliner Morgenpost. (2017, April 23). Kreuzberg lehnt Baupläne für Google-Campus ab. Berliner Morgenpost. Retrieved from <https://www.morgenpost.de/berlin/article210341725/Kreuzberg-lehnt-Bauplaene-fuer-Google-Campus-ab.html>
- Bernt, M., Grell, B., & Holm, A. (Eds.). (2013). The Berlin reader: a compendium on urban change and activism. Bielefeld: Transcript.
- Betterplace, Karuna, & Google. (2018, October 24). Pressemitteilung - Campus im Umspannwerk wird Haus für soziales Engagement. Retrieved from <https://cms.karuna-ev.de/2018/10/pressemitteilung-3/>
- #BlockSidewalk. (n.d.). Homepage. Retrieved July 28, 2020, from <https://www.blocksidewalk.ca/>
- Bremer, R. (2019, January 24). #TachGoogle - unser neues Büro in Berlin ist eröffnet. Retrieved June 1, 2020, from <https://germany.googleblog.com/2019/01/sundar-pichai-eroeffnet-berliner-google-buero.html>
- Brenner, N., Marcuse, P., & Mayer, M. (2012). *Cities for People, Not for Profit : Critical Urban Theory and the Right to the City*. <https://doi.org/10.4324/9780203802182>
- Business location center. (n.d.). Homepage. Retrieved August 5, 2020, from <https://www.businesslocationcenter.de/en/>
- Castells, M. (1983). *The city and the grassroots: a cross-cultural theory of urban social movements*. London: E. Arnold.

- Castells, M. (2000). *The rise of the network society*. Oxford ; Malden, Mass: Blackwell Publishers.
- Castells, M. (2011). *Communication power*. Oxford: Oxford Univ. Press.
- Castells, M. (2015). *Networks of outrage and hope: social movements in the Internet age*. Cambridge, UK ; Malden, MA: Polity Press.
- Colomb, C., & Kalandides, A. (2010). The 'Be Berlin' Campaign: Old Wine in New Bottles or Innovative Form of Participatory Place Branding? Edward Elgar Publishing.
- Couldry, N., & Mejias, U. A. (2019). *The costs of connection: how data is colonizing human life and appropriating it for capitalism*. Stanford, California: Stanford University Press.
- @counter_campus. (n.d.). Profile. Retrieved July 29, 2020, from https://twitter.com/counter_campus
- dealroom. (2019). Berlin Ecosystem Launch Report (p. 28). Retrieved from <https://blog.dealroom.co/wp-content/uploads/2019/07/Berlin-Launch-2019-FINAL.pdf>
- Deliverunion. (2018, March 15). Redebeitrag von Deliverunion. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/03/15/redebeitrag-von-deliverunion/>
- Drissel, D. (2011). Anarchist Punks Resisting Gentrification : Countercultural Contestations of Space in the New Berlin. *The International Journal of the Humanities: Annual Review*, 8(10), 26. <https://doi.org/https://doi.org/10.18848/1447-9508/CGP/v08i10/42992>
- Factory Berlin. (n.d.). Homepage. Retrieved August 5, 2020, from <https://factoryberlin.com/>

- Färber, A. (2014). Who Participates - Who Has Which Time? Considerations on Mobilization in the City District Using the Example of a Berlin-based Tenants' Initiative. In J. Laister, M. Makovec, A. Lederer, L. Boyadjiev (Eds.), *The art of urban intervention: Die Kunst des urbanen Handelns*. Wien: Löcker.
- Federal Ministry for Economic Affairs and Energy. (n.d.). IoT & Fintech. Retrieved August 5, 2020, from <https://www.de-hub.de/en/the-hubs/berlin/>
- FHXB Museum. (n.d.). Geschichte wird gemacht! Abriss und Aufbruch am Kottbusser Tor. Berlin: Friedrichshain-Kreuzberg Museum.
- Fridel54. (2018, March 27). Redebeitrag von der Fridel54 im Exil. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/03/27/redebeitrag-fridel54/>
- Fuck Off Amazon. (n.d.). Homepage. Retrieved July 28, 2020, from <https://wiki.fuckoffamazon.info/doku.php>
- Fuck off Google. (n.d.). Homepage [Blog]. Retrieved June 1, 2020, from Fuck off Google website: <https://fuckoffgoogle.de/>
- @FuckOffGoogle. (n.d.). Profile. Retrieved July 29, 2020, from <https://mastodon.social/@FuckOffGoogle>
- Google. (n.d.). Info. Retrieved August 12, 2020, from <https://about.google/>
- Google Campus & Co verhindern. (n.d.). Homepage [Blog]. Retrieved June 1, 2020, from Google Campus Verhindern website: <http://googlecampusverhindern.blogspot.de/>
- Google Campus & Co verhindern. (2017, October 21). "Fuck Google" [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2017/10/21/erster-eintrag/>

- Google Campus & Co verhindern. (2017, December 4). "Google Campus" in Kreuzberg verhindern! Planungs- und Diskussionstreffen 07.12 [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2017/12/04/google-campus-in-kreuzberg-verhindern-planungs-und-diskussionstreffen-07-12/>
- Google Campus & Co verhindern. (2018, March 3). Kiezspaziergang 03.03.18 – Aufruf auf englisch. [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/stuff/>
- Google Campus & Co verhindern. (2018, March 15). Redebeitrag zum FullNodeHub im Postgebäude [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/stuff/>
- Google Campus & Co verhindern. (2018, April 4). Neue Termine [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/04/04/neue-termine/>
- Google Campus & Co verhindern. (2018, July 30). Pressemitteilung: nein zu runden Tischen mit Politik und Google. [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/07/30/pressemitteilung-nein-zu-runden-tischen-mit-politik-und-google/>
- Google Campus & Co verhindern. (2018, August 29). Pressemitteilung: Google Campus verhindern! Demonstration am Samstag, 01.09.18. [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/08/29/pressemitteilung-google-campus-verhindern-demonstration-am-samstag-01-09-18/>
- Google Campus & Co verhindern. (2018a, September 2). Donnerstag, 13.09.18: Offenes Anti-Google-Treffen. [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/09/02/donnerstag-13-09-18-offenes-anti-google-treffen/>

- Google Campus & Co verhindern. (2018b, September 2). Pressemitteilung: Erfolgreiches Wochenende gegen den geplanten "Google Startup Campus" [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/09/02/pressemitteilung-erfolgreiches-wochenende-gegen-den-geplanten-google-startup-campus/>
- Google Campus & Co verhindern. (2018, November 15). From Berlin with love: warum die absage des Google Campus ein erfolg ist [Blog]. Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/11/15/from-berlin-with-love-warum-die-absage-des-google-campus-ein-erfolg-ist/>
- Google for Startups. (n.d.). Homepage. Retrieved August 12, 2020, from <https://startup.google.com/>
- Google ist kein guter Nachbar. (n.d.). Homepage [Blog]. Retrieved June 1, 2020, from <https://www.google-ist-kein-guter-nachbar.de/>
- Gradient Ventures. (n.d.). Philosophy. Retrieved August 12, 2020, from <https://www.gradient.com/philosophy/>
- Grodach, C., & Ehrenfeucht, R. (2016). *Urban revitalization: remaking cities in a changing world*. London ; New York: Routledge, Taylor & Routledge.
- Grove, M. (2016, November 23). Ein neuer Campus Berlin für Unternehmerinnen und Unternehmer. Retrieved June 1, 2020, from <https://germany.googleblog.com/2016/11/google-gibt-startschuss-fuer-campus-berlin.html>
- Güney, S., & Kabaş, B. (2017). Migrant Spaces and Childhood: Growing up in Kreuzberg. *Urbana*, (18), 1–15. Retrieved from <https://www.urbanauapp.org/wp-content/uploads/Guney.pdf>
- Haenecke, H., Suder, K., & Thiel, L. (2014, July 1). Scaling a start-up

- community: An interview with Berlin's mayor. Retrieved August 3, 2020, from McKinsey & Company website: <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/scaling-a-start-up-community-an-interview-with-berlins-mayor>
- Hain, S. (1997). Berlin's Urban Development Discourse - Symbolic Action and the Articulation of Hegemonic Interests. In M. Bernt, B. Grell, & A. Holm (Eds.), *The Berlin reader: a compendium on urban change and activism*. Bielefeld: Transcript.
- Harvey, D. (1989). From Managerialism to Entrepreneurialism: The Transformation in Urban Governance in Late Capitalism. *Geografiska Annaler: Series B, Human Geography*, 71(1), 3–17. <https://doi.org/10.1080/04353684.1989.11879583>
- Holm, A. (2013). Berlin's Gentrification Mainstream. In M. Bernt, B. Grell, & A. Holm (Eds.), *The Berlin reader: a compendium on urban change and activism*. Bielefeld: Transcript.
- ImmobilienScout24. (2018). IMX Juni 2018. Retrieved from https://www.immobilienscout24.de/content/dam/is24/documents/ibw/IMX/2018/imx_Juni18.pdf
- Jelbi. (n.d.). Homepage. Retrieved August 3, 2020, from <https://www.jelbi.de/>
- Kellerman, A. (2019). *The Internet city: people, companies, systems and vehicles*. Edward Elgar Publishing.
- Krätke, S. (2004). City of Talents? Berlin's Regional Economy, Socio-Spatial Fabric and "Worst Practice" Urban Governance. In M. Bernt, B. Grell, & A. Holm (Eds.), *The Berlin reader: a compendium on urban change and activism*. Bielefeld: Transcript.
- Lefebvre, H. (1991). *The production of space*. Oxford: Blackwell.

- Lefebvre, H. (1996). *The right to the city*. In E. Kofman & E. Lebas (Eds.), *Writings on cities* (pp. 63–181). Cambridge, Mass, USA: Blackwell Publishers.
- Make Amazon Pay. (2018, March 20). Redebeitrag der Kampagne "Make Amazon pay." Retrieved August 12, 2020, from <http://googlecampusverhindern.blogspot.de/2018/03/20/redebeitrag-der-kampagne-make-amazon-pay/>
- Marda, V. (2019). Introduction. In A. Finlay (Ed.), *Global information society watch 2019 - artificial intelligence : human rights, social justice and development*. Sweden: APC.
- Mayer, J. (2015). Cities in the making: social movements, neoliberal urbanism and critical practices - A conversation with Margit Mayer. *Diffractions*, (5), 1–11. <https://doi.org/10.34632/diffractions.2015.500>
- Mayer, M. (1993). The career of urban social movements in West Germany. In R. Fisher (Ed.), *Mobilizing the community: local politics in the era of the global city*. Calif: SAGE.
- Mayer, M. (2006a). Manuel Castells' The City and the Grassroots. *International Journal of Urban and Regional Research*, 30(1), 202–206. <https://doi.org/10.1111/j.1468-2427.2006.00652.x>
- Mayer, M. (2006b). New Lines of Division in the New Berlin. In M. Bernt, B. Grell, & A. Holm (Eds.), *The Berlin reader: a compendium on urban change and activism*. Bielefeld: Transcript.
- Mayer, M. (2012). The "right to the city" in urban social movements. In *Cities for People, Not for Profit : Critical Urban Theory and the Right to the City* (pp. 63–85). London: Routledge.
- Mayer, M. (2016). Neoliberal Urbanism and Uprisings Across Europe. In M. Mayer, C. Thörn, & H. Thörn (Eds.), *Urban Uprisings* (pp.

- 57–92). https://doi.org/10.1057/978-1-137-50509-5_2
- Morozov, E., & Bria, F. (2017). *Die smarte Stadt neu denken: wie urbane Technologien demokratisiert werden können*. New York: Rosa Luxemburg Stiftung.
- NoGoogleCampus. (2018). Keine guten Nachbarn. Google, Factory & Co. Retrieved from <https://www.google-ist-kein-guter-nachbar.de/mobi-stuff/>
- NoGoogleCampus. (2019). #NoGoogleCampus. Retrieved from <https://www.google-ist-kein-guter-nachbar.de/>
- Novy, J. (2013). “Berlin Does Not Love You” Notes On Berlin’s “Tourism Controversy” and Its Discontents. In M. Bernt, B. Grell, & A. Holm (Eds.), *The Berlin reader: a compendium on urban change and activism*. Bielefeld: Transcript.
- Novy, J., & Colomb, C. (2013). Struggling for the Right to the (Creative) City in Berlin and Hamburg: New Urban Social Movements, New ‘Spaces of Hope’? *International Journal of Urban and Regional Research*, 37(5), 1816–1838. <https://doi.org/10.1111/j.1468-2427.2012.01115.x>
- Poell, T., & Darmoni, K. (2012). Twitter as a multilingual space: The articulation of the Tunisian revolution through #sidibouazid. *NECSUS. European Journal of Media Studies*, 1(1), 14–34. <https://doi.org/10.5117/NECSUS2012.1.POEL>
- redfish. (2018). Who owns Berlin? “F*** off Google” [video] Retrieved from <https://www.youtube.com/>
- Schuetze, C. (2018, October 25). Google Retreats from Berlin Plan Opposed by Local Groups. *The New York Times*. Retrieved from <https://www.nytimes.com/2018/10/25/world/europe/google-berlin-kreuzberg-campus.html>

- Senate Department for Economics, Technology and Research. (2016). *Digital Economy in Berlin Start. Grow. Invest.* Retrieved from https://berlin-partner.de/fileadmin/user_upload/01_chefredaktion/02_pdf/publikationen/Digitale-Wirtschaft_en.pdf
- Senate Department for Urban Development and the Environment. (2015). *Smart City Strategy Berlin*. Retrieved from https://www.stadtentwicklung.berlin.de/planen/foren_initiativen/smart-city/download/Strategie_Smart_City_Berlin_en.pdf
- Senate Department for Urban Development and Housing. (2020). What does the rental cap mean for you? Retrieved from <https://mietendeckel.berlin.de/wp-content/uploads/berlin-sensw-mietendeckel-info-en.pdf>
- Shaw, J., & Graham, M. (2017). An Informational Right to the City? Code, Content, Control, and the Urbanization of Information: An Informational Right to the City? *Antipode*, 49(4), 907–927. <https://doi.org/10.1111/anti.12312>
- Sidewalk Labs. (n.d.). Team. Retrieved August 12, 2020, from <https://www.sidewalklabs.com/team/>
- Sidewalk Toronto. (n.d.). Homepage. Retrieved July 28, 2020, from <https://www.sidewalktoronto.ca/>
- Startup Heatmap Europe. (2019). *Startup Heatmap Report: Startup City brands & Highways* (p. 44). Retrieved from <https://www.startupheatmap.eu/>
- Startup-map. (n.d.). Friedrichshain-Kreuzberg. Retrieved August 3, 2020, from https://startup-map.berlin/dashboard/f/all_geo/anyof_Friedrichshain-Kreuzberg
- Thatcher, J., O’Sullivan, D., & Mahmoudi, D. (2016). Data colonialism through accumulation by dispossession: New metaphors for daily

data. *Environment and Planning D: Society and Space*, 34(6), 990–1006. <https://doi.org/10.1177/0263775816633195>

The Invisible Committe. (2014). *To our friends*. Retrieved from <https://theanarchistlibrary.org/library/the-invisible-committe-to-our-friends>

TOP B3rlin. (n.d.). Startseite. Retrieved July 29, 2020, from <https://www.top-berlin.net/>

TOP B3rlin. (2018). Do the red thing (p. 48). Retrieved July 29, 2020 from <http://top-berlin.net/de/texte/broschueren/do-the-red-thing>

Uffer, S. (2013). The Uneven Development of Berlin's Housing Provision - Institutional Investment and Its Consequences on the City and Its Tenants. In M. Bernt, B. Grell, & A. Holm (Eds.), *The Berlin reader: a compendium on urban change and activism*. Bielefeld: Transcript.

Uitermark, J., Nicholls, W., & Loopmans, M. (2012). Cities and Social Movements: Theorizing beyond the Right to the City. *Environment and Planning A: Economy and Space*, 44(11), 2546–2554. <https://doi.org/10.1068/a44301>

visitBerlin. (n.d.). Friedrichshain-Kreuzberg - Alternative lifestyles and creativity. Retrieved August 3, 2020, from <https://www.visitberlin.de/en/bezirke/friedrichshain-kreuzberg>

Wiki. (n.d.). Main page. Retrieved July 29, 2020, from https://wiki.fuckoffgoogle.de/index.php?title=Main_Page

Zuboff, S. (2019). *The age of surveillance capitalism: the fight for a human future at the new frontier of power*. New York: PublicAffairs.

STATUTORY DECLARATION

I hereby affirm that the Master thesis at hand is my own written work and that I have used no other sources and aids other than those indicated. All passages, which are quoted from publications or paraphrased from these sources, are indicated as such, i.e. cited, attributed.

This thesis was not submitted in the same or in a substantially similar version, not even partially, to another examination board, and was not published elsewhere.

Weimar, 24.08.20

Place, Date

Karina M. M. de Almeida

Signature

